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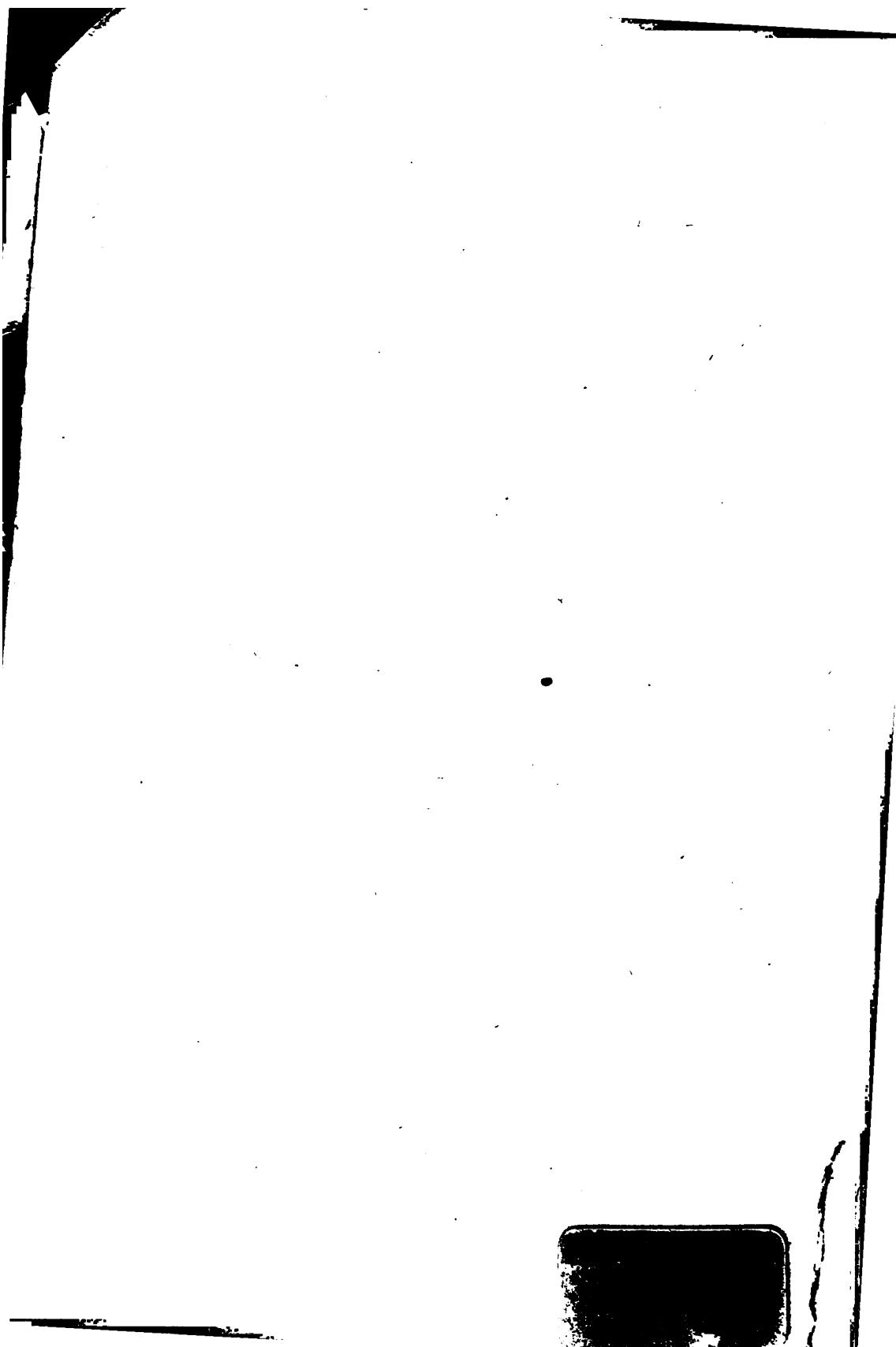


Teachers College
Columbia University

A Digest of Educational Sociology

By DAVID SNEDDEN, Ph.D.
PROFESSOR OF EDUCATION, TEACHERS COLLEGE
COLUMBIA UNIVERSITY

Published by
Teachers College, Columbia University
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CHAPTER I
THE MEANING OF EDUCATIONAL SOCIOLOGY

A. INTRODUCTORY

Sociology denotes the science and study of human social groupings, including the factors that condition such social groupings, the evolution of group forms, and the processes by which groups may be improved, both as collective agencies and as means of promoting qualities desired in individuals. Human social groups are of many kinds in form and in functioning.

Education may be distinguished as of two kinds—that carried on in schools or other agencies, specialized for educational purposes; and that effected as a by-product of vocational pursuits, family nurture, worship, recreation, social control, defence, and the like. Both kinds of education are designed, in so far as they are at all purposive, to prepare, adjust, or re-shape individuals for increased usefulness to themselves or to others (including deities), according as such usefulness is conceived at the time.

Many social groupings are relatively permanent—nations, cities, churches—while it is the constant desire of the best members of society that others, less continuous—families, corporations, parties, labor unions—shall take approved forms and functions.

But individual members of all groups come and go—their effective membership in all groups rarely exceeding fifty years, and being in fact commonly only two or three decades. Hence a large part of purposive education has always been designed rather to prepare the individual child, youth, or adult for more effective fitting into one or more groups than for usefulness to himself—although in the long run the two forms of usefulness tend in the main to coincide.

Furthermore, by all ordinary standards, *social* or *group* life tends to become more involved, more extensive, more potential of good or bad results—states become larger, customs must be replaced by laws, economic specialization and interdependence increase. The processes of preparing the young for good group membership become more difficult, require more scientific knowledge, necessitate more complicated administration.

Hence the convictions of modern peoples that a constantly increasing amount of purposive and systematic education of both young and adults is needed to insure right social membership on the part of oncoming generations of individuals.

In its prescientific stages, both the specific objectives (aims, purposes) of education and its methods were crystallized in customs and traditions, products usually of insensible accretions, perpetuated by "trial and success"

processes, and occasionally by the inventiveness of a genius. Under dynamic social conditions educational practice often lags heavily, as do practices in other departments where custom and precedent play large parts—religion, law, sumptuary standards. (Cf. China, England, classical education, education of women, and unnumbered instances in current curricula.)

The twentieth century finds many attempts to make education more varied, extended, flexible, individualized, socially functional. Movements for "enrichment of curricula," for "child study," and for socialization of school life are symptomatic of new interests and points of view. Psychology, always expected to furnish guidance to methods of teaching, has lately reached the point where it can actually do so. Educational administration becomes scientific in certain material aspects—buildings, finance, control.

But endless old difficulties persist and new ones develop because objectives remain so largely on faith levels—tied up in beliefs, customs, traditions, radical aspirations, the catch-words and formulae of partisan cults and sects. Sociology itself, just emerging from metaphysical swaddling clothes, has not been regarded as a promising source of guidance. Little scientific effort has yet been given to direct analysis of aims and values in any but a few departments of education.

Ultimately, a developed sociology must chiefly provide the objectives required to give definiteness of purpose to major and minor educational procedures. Sociology must reveal what are the goals expected to be realized for individuals (of various kinds and potentialities) as well as for social groups through their adjusted individual members. Out of a thousand possible paths that may be taken by education there must, in a given situation, be found the score that are most timely and essential, while psychology will provide means of ascertaining the educabilities of given individuals and the most effective means of reaching stated goals. Some concrete problems will reveal existing needs.¹

1. For many years American elementary schools have made much of the subjects of arithmetic, as the high schools have of algebra and plane geometry. In each case the subjects have grown in elaborateness and complexity while various traditions have gained currency as to their educational values. Private schools, women's colleges, and other habitually conservative institutions still impute mystic values to algebra and geometry, as, naturally, also successful laymen, whose conceptions of educational values were formed two or more decades ago.

If systematic experimentation (for which education is now ready in this field) should show that the mathematical subjects, and especially their more involved and less "practical" phases, possess unique values for mental training (discipline of "reasoning powers," etc.) analogous to the alleged values of Indian clubs or the trapeze in physical discipline, then, of course, justification for the prescription of these subjects for admission

(1) See Snedden, D., "Educational Sociology," *Am. Jour. of Soc.* 25:120.

to college, graduation from high school, or promotion in elementary school would exist.

Apart from these still uncertain values, the mathematical studies possess obvious values to some or all individuals and therefore to society. Certain vocations—electrical engineering, bookkeeping, pharmacy, artillery direction, navigation, the plumber's trade—require, respectively, for their successful prosecution certain specialized knowledge and ability to use mathematics. All persons must buy commodities, and all ought to read journals, and to invest savings ("consumers needs"). For each of these functions some (perhaps not much) knowledge of arithmetic is very desirable, if not indispensable, for all. Here we find justification for "general mathematics."

But our methods of meeting "social needs" through these studies are now probably ill-adjusted and wasteful in extreme. General arithmetic is filled with topics appropriate only for specialized vocations. Very few girls can ever expect to use algebra vocationally. Slow children are seldom well trained in needed elemental processes. Essential "approximation" calculation is neglected. Cultural ("appreciation") values are rarely realized.

Can we now as results of careful studies of social needs: (a) define "consumers needs" which should be basis of general or universally prescribed arithmetic; (b) define actual prevocational offerings possible to elementary school, high school, and liberal arts college, holding them as electives for persons reasonably sure of needing them; (c) define the specialized mathematics appropriate to various types of vocational (basic and extension) schools; and (d) promote the development of "appreciation" subjects as elective offerings to increase "general culture"? Here lie important fields of investigation.

2. Much time is now given in elementary schools to the teaching of "oral reading." Nevertheless most adults (including, sad to say, most teachers) read aloud poorly. Once when books and papers were scarce oral reading served a useful social function—can it ever again? We all move towards silent reading, individualized to tastes and needs. Only a half-score of vocations put a premium on the "good oral reader." These questions of social objective now need answers: (a) Under present conditions are oral reading abilities of any special significance to adults generally, for cultural, civic or vocational purposes? (b) Is "silent reading," now obviously a universal need, well taught (or systematically taught at all) at present? (c) Except in very elementary stages (first two grades) is oral reading probably a hurtful rather than a helpful means of teaching silent reading? (d) What are the vocations which really require oral reading, and for them can it be elected in advance as a prevocational¹ subject or can it best be given in a vocational school?

(1) A subject is here called "prevocational" when its functioning in a given vocation is known, whilst its character is such that it can profitably be taught in schools normally attended before entry on vocational schools. Trigonometry taken in high schools by students expecting to enter engineering schools, "pre-medical" biology, and "pre-legal" economics taken in liberal arts colleges, are established examples.

3. The several states now expend together probably between eight and ten million dollars annually on modern language instruction in high schools. What are the purposes, and what the present results, of this expenditure? What results do we expect in terms of adult powers of reading? speaking? written composition? What standards do we hold of these powers, and what expenditures of time and energy have we estimated to be necessary to their realization? What are really our expectations as to obscure cultural appreciations—of peoples, literatures, reactions on English, vocational guidance? Are these realized? Why do we permit, even encourage, sometimes prescribe, *two* modern languages when tangible results in one are very doubtful? Hardly any criticism can be too severe in reference to the superficial, aspirational, hit-or-miss objectives of American modern language instruction. Difficulties involved are more fundamental than poor methods of teaching. They lie first in domain of social purposes.

Elaborate studies of social need should soon be provided. (a) Is it important that *some* American adults should, in the next generation, read with ease one of these: French, German, Japanese, Russian, Chinese, Spanish, Portuguese? How many, roughly, in each—for their own vocational needs? for the social needs of the nation? for society's needs of radiant sources of cultural appreciations? Similarly, are speaking (and auditory) powers necessary? Writing powers? For what numbers?

(b) What investment of time and learning energy will normally be required in the case of persons of super-average native linguistic abilities to attain to profitable powers in above directions, if learning is begun at age 20? 18? 14? Is earlier beginning—at age 6 or 2—practicable for public education?

(c) What means shall be employed: (1) to select schools which should or can profitably undertake teaching of one or more modern language? (2) to select the learners who shall be encouraged, perhaps endowed, to pursue such studies to worth-while ends?

4. The place of the fine arts in modern life is as yet far from clear, and hence the responsibilities of the schools are naturally most uncertain. Here is still an active battleground of faiths, aspirations, prejudices—protagonistic and antagonistic. A marked example can be found in music. The American people now spend much wealth on music of commercial (and often mechanical) kinds. Persons fond of "better" music believe standards of utilization should be raised, but their reasons seem to rest largely on unproven assumptions. We need sociological studies of these questions: (a) What are the primary, and what the incidental, functions of music in modern life—moral refinement and uplift, filling leisure time richly, promotion of socialization (sociability, harmony), furthering of right worship?

(b) What are the best means of causing music to function desirably—training a few to advanced powers of execution (vocational or specialized amateur), training many talented ones to moderate powers of execution

(singing, playing, chorus leading), or striving to train all in some degree of execution, e. g., chorus?

(c) What are the social values of developed or cultivated capacities for appreciation, unaccompanied by any abilities in execution; and can such capacities be cultivated, quite independently of attempts at vocal or instrumental execution?

(d) Is it practicable or desirable clearly to differentiate social functions that can be ministered to by particular types of music and in education concentrate on approved varieties of music to these ends—patriotism, worship, social reform, appreciation of nature, stimulation of filial affection, elevation of relations of sexes, serenity in affliction? What can we determine as to varieties of music most suited to "wise use of leisure," diversion for the mentally fatigued, recreation for the physically fatigued? What are specific characteristics of socializing or "democratizing" music? What values inhere in "popular" music? Are there cultural values in music not explicitly to be defined or consciously to be sought?

5. The photodrama has come to play a great part in the life of the young. It is obviously an emotional agency of much force, whilst its influence in revealing the social standards of others and in affecting those of persons still plastic is probably much greater than is ordinarily assumed. What are the various specific influences exerted by it, interpreted qualitatively as socially constructive, socially destructive, etc.? (Our own mature subjective valuations may easily mislead us here): Does the moving picture make for "intellectual instability"? What is the evidence? Does it injure eyes or nerves? What evidence? Does it provide, for tired persons, a "good use of leisure"? Why? In what ways can it, as a commercial agency, be further subjected to right kinds of social control?

B. SUMMARY

1. Educational Sociology has its analogues in: educational psychology, engineering mathematics, agricultural chemistry, medical biology, navigational astronomy, architectural drawing (or art), mining geology, etc. In each case a body of "pure" or "detached" knowledge or art is drawn upon for particular contributions to a field of practical effort or "applied science" (or "art").

- a. A "pure science" has its customary logical organization. Also, a field of applied knowledge (in reality a field of practice) has its logical organization. But a "hyphenated" subject, connecting a field of practice and a pure subject, can rarely have a logical organization. It must be selective, first of the elements of the pure subjects that are applicable, then of the portions of the practice field that are assisted by the knowledge thus carried over.
- b. But, in practice, teachers of "applied" sciences have either required as prerequisite to their work a general course in the

pure science, or else have made a considerable portion of the applied course consist in reality of the logically arranged materials of the pure subject—e.g., "agricultural" physics often **presupposes general physics**, although such topics as optics, acoustics, and, usually, electricity and magnetism, have no relation to farm work.

2. Education, as the scientific study of a field of practice, is reinforced by contributions from such "pure" subjects as history, psychology, philosophy, physiology, economics, architecture, statistics, sociology, etc.

- a. Educational history, philosophy, and architecture are clearly defined fields.
- b. Educational psychology, starting with certain perceived needs or problems (especially as regards methods of instruction, learners' capacities, etc.) in education selects from psychology, helpful knowledge and method towards meeting these needs and solving these problems, especially as regards learning capacity and effective methods.
- c. Educational physiology applies in school hygiene, etc.; educational economics in the administration of education; and educational statistics involves use of those facts and methods of statistics as a scientific study that applies to elucidation of education problems.

3. Education, as a field of practice, (a) deals with persons already living in group (i.e., social) relationships; and (b) its largest determining purpose is to fit the young for effective participation in group or social life, especially as regards vocational, moral, civic, and cultural qualities.

But the "pure" study of society and societies is sociology (with its auxiliary sciences, anthropology, ethnology, social ethics, civics, and even political economy and economics).

Hence educational sociology designates the study that, starting with vital problems of education, selects from sociology (and the other social sciences) materials and methods that will contribute to the solution of these problems.

- a. A minor field of usefulness for educational sociology involves interpretation of the instinctive social life of children—as seen in gangs, cliques, sports, taboos, imitation, submission to authority—which may guide in making educational programs and providing for discipline, school management, coöperation with non-school agencies of by-education (home, shop, etc.).
- b. The major field of usefulness for educational sociology will be found in its contributions to the determination and comparative evaluation of educational objectives (goals, aims, purposes); in throwing light on the means and methods requisite to the realization of these; and in testing the ultimate efficacy of these means and methods.

- c. In a measure other sciences can be drawn upon for definition of educational objectives. Standards of physical fitness desired or sought on behalf of the individual (in a non-social sense) could be derived from biology, "human" zoology, medicine, thus giving educational biology, etc. Standards of aesthetic or intellectual development in a relatively individualistic sense could be derived from such contributions of educational psychology as are specialized to this end. But so many of the ends of education are to be evaluated in terms of social results that we may assume educational sociology to be the major study for this purpose.

C. PROBLEMS

The variety and number of problems presented by the study of the possible and desirable objectives of education are almost endless. For convenience these can be classified as:

1. Problems of the objectives which shall be held for school education for normal children in regular or customary schools of general education. For example:

- a. What are the results to society of kindergarten education as now administered?
- b. Assuming the financial and administrative practicability of providing for a substantial amount of school education of all children between four and six years of age, (or three and five), what should be the primary aims of that education? To offset deficiencies in home education? To provide for certain forms of fuller and more rapid intellectual (or moral or physical) development than the home can provide?
- c. What are desirable objectives in the training of children, six to twelve, in appreciation of the harmonies found in plastic art? musical art? literary art?
- d. What are the actual social objectives that should control in the organization of materials of history for elementary school purposes? Or, what are the types of social ideals and what the bodies of organized social knowledge that should be possessed by boys from ten to fifteen years of age as a part of their equipment towards citizenship, and how far can these be attained through instruction in history or other forms of social science?
- e. Of what value to society is, or would be, certain definite forms of physical and mental training which are or might be accomplished through school education, e.g., advanced ability to handle mental arithmetic, great accuracy in mechanical drawing, precision in use of grammatical constructions, sharpened perception of harmonies of form and color in surroundings, accurate marksmanship with rifle, fine penmanship, skill in debating, etc.?

- f. To what extent shall physical education (or physical development) be promoted through the schools? And what part can best be played in this by: regular teacher (in lower grades)? a special teacher of hygiene (upper grades)? playground teacher? school nurse? school physician? lecturer?
 - g. What are desirable objectives of practical arts instruction, ages 6-12? training, same ages? same subject, ages 12-14 14-16?
 - h. What specific values can be comprehended under the term "mental training" or "trained mind"? Which of these are feasible and under what circumstances? What are current illusions as to mental training?
 - i. What are the actual results of the by-education for children 10-15 of: moving pictures? newspapers? libraries? Sunday schools? street life and playground? police power? participation in productive work?
 - j. How are deleterious results to be overcome? How are valuable results to be furthered?
 - k. What is meant by moral education? What are the essential phases of moral by-education resulting from the school? Does the school now achieve any direct moral education? Can it be made to do so? What are some possible means?
 - l. What part has *physical work* played in development of youth in the past? What are contemporary deficiencies? By what means might these be remedied?
2. Problems of the objectives which shall be held for general education for special classes.
 - a. Shall educational objectives for subnormals be sharply differentiated, according as these will probably (a) be prepared for independent living in the competitive social order; or (b) be retained by the state under custody?
 - b. What are desirable minimums of cultural education (including mastery of instrumental subjects) for (a) the blind? (b) the deaf? (c) the severely crippled? (d) the moron? (e) the imbecile? and (f) the deaf-blind?
 - c. What are desirable and feasible objectives of education for immigrants (non-English speaking) reaching here at 15-25 years of age?
 - d. What is desirable and feasible in extended general education of average adults early entered on specialized occupations?
 - e. What are the objectives of religious education? What are the most effective agencies for it? What are useful means? What is possible place of *public* school?
 3. Problems of objectives for vocational education.
 - a. What has been effectiveness of agencies of vocational by-

education in the past? Are these of diminishing potency? Specify by occupations.

- b. What are factors determining the individual's productive competency: (natural qualities; social inheritance—skill, insight, arts, invention; industrial organization; capital; leadership; exchange; individual's health, happiness, will, training, age, etc.)?
- c. Wherein do liberal (or general) education and vocational education differ fundamentally as to objectives? What are the essential characteristics of man as producer? As consumer? Show graphically man's normal life area of: (a) consumption in excess of production; (b) production in excess of consumption.
- d. Shall we classify as producers: public singers? soldiers? policemen? merchants? non-wage-earning housewives? teachers? inventors? children being educated? non-working holders of inherited capital? bankers? prisoners? gamblers? pensioners?
- e. To what extent can vocational efficiency (for specified vocations) be enhanced by *intellectual study* (as distinguished from training for skill) of factors involved?
- f. What part can apprehension of sociological significances of occupational processes play in enhancing vocational interest, comprehension, satisfaction, advancement, efficiency?
- g. To what economic tests, or conditions, can learners of vocations be subjected, ideally? practically?

D. MISCELLANEOUS PROBLEMS AND TOPICS

- a. What is a "pure science"? Name ten. What is "applied science"? Show how chemistry may be applied in cooking, soil tillage, tanning, medicine, war, clothing manufacture, photography, laundry operations. Can you give any acceptable meaning to the phrase "the study of applied chemistry"? Or to the phrases, applied physics, applied mathematics, applied bacteriology, applied psychology or applied sociology?
- b. What are the sciences drawn on for help in war? agriculture? homemaking? manufacture of steel? medicine? street paving? food conservation? navigation? Would it be correct to describe each of these as a "field of applied science"? As a field of practice, is each capable of being organized as a systematic study?
- c. Show the places of the following sciences in the administration and processes of education: psychology; hygiene; architecture; finance and accounting; sociology.
- d. Does agriculture draw upon the same departments of chemis-

try as photography? What portions of astronomy do navigators require? What are the essentials of bacteriology to the cook? To the food conservator? To the tropical plantation manager? What conclusions can you draw as to the extent to which a "field of practice" needs to draw on a "pure" science? Have you any conclusions as to how an average practitioner can best master the portions of the applied sciences needed by him? Illustrate from: navigation (astronomy, mathematics, meteorology); farming (physics, chemistry, botany, bacteriology, zoology, meteorology, economics, mathematics); war; cotton manufacture; live-stock husbandry; telephony; primary education (psychology, architecture, plastic art, physiology and hygiene, sociology, social psychology).

- e. Illustrate some of the possible contributions of sociological studies to practical problems of:
 - (1) School discipline and government as a means of preparing for adult citizenship?
 - (2) The need of special oral English instruction and training for children of immigrants (by racial groups).
 - (3) Determination of the needs of vocational education in schools for the factory vocations followed chiefly by girls aged 16-20.
 - (4) Discovery of the desirability of teaching Latin as a means to better English.
 - (5) Effects of city life on growth processes of a physical kind?

REFERENCES: From bibliographies on Educational Sociology, Social Aspects of Education, and General Sociology ascertain various meanings of (a) "educational sociology"; (b) "socialized education"; (c) education as a means to "social efficiency." For more general treatment of relations of "pure" to "applied" science, see chapter references in Walter Libby's *Introduction to the History of Science*. Also various articles indexed in *American Journal of Sociology*. Prescribed references: 4: 3-21; 25: 247-304; 27: 1-47; 21: 652-91; 23: 705-28; 22: 21-51; 28: 427-51. Small, 214-301; Todd, 505-35; Ward (3) (II), 540-634; Ellwood.

CHAPTER II

SOCIAL STRUCTURES

A. GENERAL POSTULATES

Men, women, and children nearly always live, work, fight, and play in groups. Membership in groups is almost always advantageous to the individual, and also disadvantageous in certain respects felt by him. The child in the family, the sailor in the crew, the soldier in a company, the member of the community, could, probably, not live long if all support of others were withdrawn; but at the moment each of these tends to resent the constraints, the restrictions, the obligations imposed by his fellows. So in practically all social groups, and especially with younger or less "domesticated" or "socialized" members, there exists a constant tension; the group tries to "tame" the individual, while he has a tendency to run alone. Hence result differences, strife, sin, crime, and revolt.

But only through support and protection of groups can human beings accomplish much. The child needs the family; young workers need parents or other employers; learners need teachers; play is not satisfactory without companionship; most work requires coöperators, if not at the moment, at least as a previous means of providing tools, arts, etc.; while most worship also seems to require joint effort. For the time a strong man may live alone, a genius may work alone; but even a Robinson Crusoe succeeds only by what generations have taught him.

Hence by long evolution, survival of the fit, elimination of the unfit, has been produced that being called man who is first a combination of social and individualistic innate tendencies and second the builder of customs and laws which in most cases confirm and extend his native qualities, but in some few cases check or divert them. (Kropotkin; Dealey; Boaz; Fiske (2); Sumner (2).)

It is probable that man has lived in small social groups in anthropoid and primitive human stages for hundreds of thousands, if not millions, of years before he reached the stage where pastoral and agricultural developments made practicable large groups. Hence man's deepest social instincts center in *small* group relationships—filial, fraternal, parental, gang, clique, clan, partnership, chum, company, village. Most of the customs, conventions, taboos, ceremonies, social habits, morals, etc., that make up *moral* behavior have to do with *small group* life. (McDougall, 265-302.)

When human beings find it necessary to fight, work, live, and play in large groups, many difficult adjustments must be made. Native instincts towards strangers, submission, routine work, separation from home, post-

ponement of satisfaction, self-abnegation, all make onerous and distasteful the conditions imposed by large group "efficiency." Hence conquest, slavery, laws, penalties, regimentation, education, property, nationalism, and extensions of religion. Evolution takes direction of destroying, or denying descendants to, groups that cannot meet conditions of "large group" coöperation, control, advance. Even social systems thus compete; the poor form of state, of army organization, of mechanism for procuring justice, education, invention, or devoted leadership fails, and carries to extinction those relying on it. "Large group" systems capable of winning in evolution must also work back towards improving individuals—in health, physique, fighting and working qualities, morals, culture; and also towards improving small groups,—families, communities, partnerships, corporations, schools, cities, states.

Social groups are of different kinds according to the services they render. The family group for reproduction; the partnership, band, guild, company, union, corporation, army, for defence, aggression, work; the community (village, town, countryside) and commonwealth (city, province, state, nation, empire) for joint occupation of territory, division of labor, and political functions; churches, denominations, for worship; clubs for sociability and culture; schools, cults, societies for education and culture; parties for the promotion of political or other propaganda; and the like. Each child is born into certain groups, grows into others, and "joins" still others as he approaches or enters maturity.

Social groups are often longer lived than any individuals composing them; their members come and go. Groups newly formed usually are made up of selected "like-minded" personalities. Established groups have processes more or less elaborate by which they select (when they can) and shape newcomers to their standards and ideals (social control).

Rarely are all the members of a group of equal age, native strength, experience, training, moral goodness, wealth, health, coöperative power, etc. Those having the most of these qualities exert a larger influence on the weaker—prestige, leadership, ascendancy, guidance. In any group the tendency is always towards specialization of function—leadership and followership, division of labor, regimentation. "Good" membership in any group presupposes at least either well-developed instinctive adaptation; prolonged habituation, motivated by fear, love, ambition; or intelligent perception of advantages of group action.

Social groupings often present analogies to individuals, as respects having youth and age, losing or winning in struggle for existence, in having functions well or poorly coöordinated, in rendering real service, etc.

A species or stock carries and passes on its acquisitions as biological inheritance (organs, instincts) or social inheritance (knowledge, customs, inventions, arts). Animals (consider especially ants, bears, crows, and the like) are strong in relatively definite instincts and weak in transmission by social inheritance. Man is a unique animal in the magnitude of the social inheritance he rolls up through the generations and transmits through tools, language, experience—knowledge, arts, customs, laws,

science. He has probably more *general* and fewer *specific* instincts than most animals. Man therefore evolves finally a social inheritance that becomes civilization, a very artificial thing, pulling far away from original nature—and doing so, becomes superior to (master of) animals, plants. He shapes the earth to his needs, domesticates animals, develops knowledge of the remote, conceives higher ends, develops endless new wants and means of satisfying them. He may so over-cultivate himself, over-organize his life, as to break down original nature.

Man, like other organic forms, tends to increase faster than means of subsistence. Competition, conflict, extermination result. The coöperations necessary to strengthen group life are strengthened by natural evolution and external means, while the qualities of competition necessary to subdue or destroy rivals for available goods are similarly developed, naturally and artificially. But competition steadily forces enlargement of competing groups, and hence range and intensity of coöperation, of those having like interests in given groups. In a crowded world, struggle for food and other needed wealth (giving "economic determinism"), may transcend all other struggles; but under some conditions other forms of struggle seem paramount.

Examine the foregoing postulates in connection with these social groups or forms of grouping:

1. The family: conjugal pair; parents and children; patriarchal family; the "family" as large grouping of relatives; "family" of several generations; fraternal group.
2. The household, clan, phratry, tribe, confederation.
3. The band, clique, gang, company, host, mob, crowd.
4. The patriarchal (and slave-holding) household, village, shire, municipality (town, city).
5. The city-state, province, county, state, nation, empire, league.
6. The squad, company, regiment, brigade, army, battleship crew.
7. The partnership, corporation, syndicate, trust.
8. The guild, trade union, grange, federation of unions, association.
9. The party, sect, "ism," school (of thought), cult.
10. The congregation, church, denomination, monastic order.
11. The "society," association, guild, school, college.
12. The fraternity, "secret society," knights, "club."
13. The reception, "party," dance, "fiesta," celebration, commencement, court, etc.
14. Race, caste, "lower class," "ruling class," "poor whites," "east siders," "half breeds," "laboring class," "capitalist class," nobility, club women.
15. Christians, liberals, *intelligenza*, suffragists, socialists, scientists, agnostics, barbarians, "Huns."

REFERENCES: 1: 349-73; 1: 1-51; 51-97; 149-91; 3: 6-55; 81-101; 21: 29-42; 84-109; 449-551; 22: 153-176; 256-299; 23: 325-97; 25: 1-49; 49-126; 26: 57-90; 28: 17-73.

B. SOCIAL GROUPINGS

Social groupings of all sorts are chiefly products of natural evolutionary processes (accidental variations and inceptions, blind experimentation, survival and perpetuation of the fit, elimination of the unfit, etc.); but conscious and purposive action plays an increasing part in the later stages (empire builders, colonizers, constitution-makers, reformers, church-founders,—Caesar, Mohammed, Brigham Young, Luther, Gompers, Cecil Rhodes, Rousseau, Thomas Jefferson). Some primitive groupings, once very strong, but now non-existent or diminished in function, still repay study because of light they shed on social psychology and especially on retrogressive tendencies in modern life and compensatory contributions needed from education. (Ill. from the patriarchal household, clan, tribe, guild, partnership, agricultural village, autocratic state, racial caste, sumptuary and cultural caste, etc.). But of chief importance is searching study and evaluation of social groupings, now matured or inceptive, of apparently vital functioning—monogamous family, city, nation, corporation, labor union, cultural association, political party, democratic church, sociability club, etc. Every current sociological tendency is here in direction of supplementing, if not substituting for, blind evolutionary processes scientific and purposive consideration, control and reconstruction by processes partly educational and partly legalistic in nature.

1. Genetic or kinship groupings are the family, household, clan, phratry, tribe and, in a sense, the ethnic nationality and the "race." Where common ancestry does not exist, adoption is necessary ritual—of captured or received wives, men seeking asylum, etc.

- a. The family is still a vital grouping, but it tends to lose its *inclusive* character (close affiliation of uncles, cousins, offspring families) and some of its functions (family worship, family education, coöperative production, joint recreation). Other functions increase (family support into maturity, specialization of mother functions towards child-care and sumptuary control). The monogamous family with social strivings for marital fidelity, probably originating in cold or dry climes where conquest and enslavement are not extensive, tends to become generally approved form, largely, perhaps, because of increased guarantee of effective rearing of offspring. Society uses many means to preserve and improve the family (legislation, urgings of religion, elevation of women, inheritance of property, conventions of courtship, education in home-making, pride of family, ancestor respect, taboos on prostitution). But degenerative influences are ceaselessly operative. Some are ancient, as promiscuity in sex relations; instability of man's interests, thrift, and earning power; and results of war. Some are essentially modern, as mobility of labor; rapidly rising standards of living; physical impairment of woman through preoccupation in youth with pursuit of culture, social decora-

tiveness, and, possibly, specialized nervous indoor wage-earning vocations; excessive refinement of standards imposed by living in upper economic levels and by romantic ideals of marriage; some anti-social effects of diffusion of ideals and knowledge of means of birth control; and removal of restrictions on divorce.

Each of above types of social action has its advantageous features and effects; but under some conditions its results on family life are obviously disastrous, especially where proportions involved are large or best stocks are affected. Mobility of labor as produced by slavery; diffused (as opposed to mass) migration; dispersive effects of life of soldiers, sailors, hunters, explorers, miners, builders, railway workers, students;—precludes the normal settled residence best for family solidarity, encourages marital instability, irregular sex relations, early flight of children, and, in higher levels of intelligence, excessive restriction of progeny and preoccupation with immediate satisfactions of adults.

Rising standards of living lead to postponement or abandonment of marriage, postponement and excessive restriction of progeny, undue strain on income earner and "society position" maker, wrong ideals as to what constitutes normal size and character of family, excessive preoccupation with material gains on behalf of present generation. Remark purposive character of family restriction among Catholic clergy, professional men, ambitious women, military officers, sons and daughters of the prosperous, and demoralizing effects among artists, singers, writers and business leaders, many of whom seek the satisfactions, but avoid the responsibilities, of mating and marriage.

Little is scientifically known yet of effects on progeny bearing and rearing of early forced or induced preoccupation of girls with "mental" work, pursuit of decorative ideals ("woman as social decoration" for man or "society") and consequent restrictions on physical play and denial of physical ("large muscle") work. But in view of conditions of ancestral evolution it is inherently probable that effects are often sterility, abnormally hurtful parturition, defunctionalized nursing organs, waning of instinctive interests in wifehood and motherhood. Teaching, indoor salesmanship, and "light" factory work in which millions of girls now engage in pre-marriage years, nerve wearing and indoor, may have similar effects.

Among certain highly cultivated classes, or those with specialized expensive tastes, celibacy is prevalent, due to inability to find "ideal" mate. This is closely related to rising standards, but is also accompaniment of "romantic" appreciations gone to seed, of incompatibility, and of willingness to sacrifice future of species to present satisfactions. (Celibacy of monastic

orders not to be included here, probably, because of their pre-occupation with "other worldly" life.)

Ideals of families not excessive in size (the irresponsibly produced "rabbit warren" type), ideals of self-restraint and continence in family relations, increasing intelligence and independent position of women, social approval of divorce for proved incompatibility, diffusion of knowledge of means of birth control, may all operate, in spite of their beneficent effects, as "diseases" of family group life, under conditions suggested above.

"Race suicide" may or may not be disastrous in the "long run" to a society whose membership is rapidly increasing and standards rising, according as it tends to eliminate the best or worst stock.

PROBLEMS FOR STUDY

(1) Describe twenty social groups in which you have membership. Arrange in respective orders of: (a) their importance to you; (b) their appeals to your interests; (c) their claims on your time; (d) their claims on your money; (e) their importance to the state now.

(2) Describe certain social groups of which you have knowledge, the net effects of which appear to be harmful to: (a) certain economic groups; (b) certain religious groups; (c) certain political parties; (d) a local city or state; (e) the nation; (f) an international alliance; (g) organized religion in general; (h) current standards of family life.

(3) Show how the demands of certain groups compete for your service. Show certain persons known to you are failing in obligations to highly important groups.

(4) Do people appear to you now less or more coöperative than formerly? Distinguish several types of coöperation—conjugal, vocational, religious, political, sociability, cultural—and try to prove your contention. Is the corporation an "advanced" form of coöperation? The city? The transatlantic steamer? The Catholic church? A university? A coal mine?

(5) Show how coöperative production (including distribution and exchange) differs to-day in kind and degree from coöperative utilization. Describe various type of coöperative utilization—in home, hotels, clubs, schools, and armies. What seem to you defects in processes by which we collectively obtain to-day in cities: milk, streets, news, paintings, results of research, security from burglary.

(6) Is it probable that the following have in certain eras been socially valuable: slavery; polygamy; idolatry; absolute monarchy; wars of extermination; capital punishment; wife purchase; infanticide; communism (land); communism (consumable goods); political government by priest-hoods?

(7) Historically, has the monogamous family been common in tropical

regions? Why, probably? Why should cold regions put a premium on the monogamous family? In what respects is "the family" growing "worse" in America? In what respects better? Repeat, specifying families of: farmers; prosperous urban dwellers; recent Mediterranean immigrants; negroes; skilled laborers; professional men.

(8) Under what circumstances does life celibacy seem socially desirable for: (a) men of low economic ability; (b) men of exceptional talents or of genius; (c) women of fair ability; (d) women of good earning power.

REFERENCES: 1: 112-57; 2: 311-53; 3: 55-81; 4: 61-78; 21: 525-51; 22: 273-99; 26: 49-63; 27: 571-606; Abbott; Collidge; Dealey; Drysdale; Fiske; Goodsell; Lichtenberger; Putnam; Thomas; Calhoun.

2. Under conditions of disorganization of the more enduring social groups whose members are well "trained," domesticated, or socialized, a variety of sporadic social groupings appear. These are so often pathological as to deserve careful consideration both as symptoms of social disintegration and as forerunners of social explosion. Such groupings tend naturally to be formed of those already like-minded by virtue of kinship or residential, vocational, or cultural association; but, given sufficient concrete incentive, they may be formed of individuals very heterogeneous in the above respects. The solidifying cause is usually to be found in common perception of danger, concrete gain, possible revenge, or other more or less temporary stimulus, usually strongly emotional.

- a. Youthful gangs and cliques seem to have a definite instinctive basis, easily taking elaborate shapings in a favoring environment.
- b. Mobs, crowds, and various "isms" doubtless have instinctive foundations near the surface, but they also express cumulative massing of partly suppressed aspirations, grievances, "new growths," and unsuspected decay of old standards.
- c. Tribal and other "outcasts" or "exiles," criminals and rebels, the oppressed and disinherited, tend to form bands, adult gangs, sometimes "hosts" with whom "organized" society is always at war except for short periods of truce. In the presence of wealth stored by organized folk, these bands tend usually to be parasitic or predatory—bound together by perception of immediate and concrete objectives.
- d. Clan and tribal formations survive only among very backward peoples, but very probably some abnormal psychological manifestations express obscure vestigial survivals of the basic social instincts evolved within them. Feuds and vendettas, the success of the "boss" in congested areas, fraternities, secret societies, tongs, gangs, loyalties, initiations, and even the rivalries of schools, cults and parties may thus have roots in the "blood brotherhoods" of the past.

- e. The real or supposed "ethnic" group or nationality is to-day, obviously, one of the greatest barriers to "large nation" solidarity. The strong tendencies of economic life, of science, of sumptuary standards, of arts, and probably of rationalistic religion is towards enlargement of areas of general intercourse, coöperation and union; whilst race, common ethnic origins, and emotional religions seem to interpose barriers. The "small national," the oppressed or submerged peoples, seem always heavily to capitalize their ethnic separateness. Caste often owes at least its origins to racial differences.

PROBLEMS FOR STUDY

(1) What are some of the "assimilation" problems presented to-day by: specified immigrant groups in the United States; French Canadians in Canada; Dutch in South Africa; negroes in America; Irish in United Kingdom; ethnic elements in Italy, France, Denmark, Russia.

(2) Define the meaning of Americanization in general. What are its special implications for: political ideals, religious aspirations, culture, sociability customs, moral customs, sumptuary standards?

(3) What parts are played in America by: college fraternities, secret societies, tongs (Chinese), vendettas (Italian, Southern mountain whites), cults, "bossed" parties, vocational unions.

REFERENCES: 1: 157-72; 2: 233-76; 276-311; 3: 3-55; 316-23; 4: 42-61; 21: 449-581; 22: 153-69; 256-299; 27: 17-73; Commons; Davis; Vincent; Starr; Sumner (2); Powers (2).

3. Common occupancy of contiguous territory by persons among whom kinship bonds are weak or not recognized forces beginnings of political groupings. If it were not for necessities imposed by war or resulting from conquest these associate *community* groupings—village, shire, mir, municipality (town, city, borough), would tend to evolve more extensive governmental functions than *federate* political groupings—city, state, county, province, principality, kingdom, state, nation, empire.

- a. Among pastoral peoples and where slave-holding estates develop, an elemental political organization results that may be called the patriarchal or feudal household.
- b. The village community has origins back in clan, tribe, and feudal household. It is as ancient, or in some respects more ancient, than the family and the generating agency of a large part of all that we call political consciousness, public sentiment, public opinion. The conditions of the settlement of America (Canada and United States) interrupted (perhaps only temporarily) evolution of village groupings here for agricultural peoples; but in rest of world tillers of soil and pastorals dwell in village groups. Village political organization and procedure tend to remain in undocumented and often half-articulate

forms of customs, conventions, traditions, rites, beliefs, social observances. Where conquering groups seek to impose uniform law on villages, endless complications arise—cf. Rome, British India, Russia and feudal Europe generally.

The village loses vitality in America. "If God made the country and man the city, then the devil must have made the small town." Political functions go to county, state, or nation. Economic specialization by regions, and ease of transportation destroy the economic, and to some extent the cultural and social, autonomy and social "completeness" of the village.

- c. America seems not yet to have evolved, except in rare instances, a genuine rural community of peoples sufficiently in touch with each other to be called "real associates," to exhibit the social consciousness necessary to a considerable degree of political autonomy. But the need for such is keenly felt by rural leaders and students. Political functions of rural areas are now largely exercised by federate groupings—perhaps inevitably, as intelligence of voters, ease of communication, and science of administration grow. Economic, recreative, cultural and even religious functions tend towards commercial specialization on basis of urban standards.
- d. Industry and commerce give rise to the city which, everywhere, has had its chief development during last century, although many political foundations were laid when mediaeval cities fought to independence of feudal control. Now cities are very vital theatres of political evolution, where customs give way to documented ordinances, laws, and charters, where representative and full paid specialist governments are indispensable, where common ownership of utilities increases, and enduring "party" groups are formed. The area of the city necessitates contiguity of residence; but its population numbers preclude "associate" acquaintance; while its community of interests necessitates federate coöperation similar to that of the nation. European and American cities are seething laboratories of conscious invention of political forms and functions.

The city constitutes a highly artificial environment for individuals and for older types of small groups. The associate community as a political organization almost disappears—strong efforts are being made to recreate it. Productive functions of the household group become much reduced. Facilities for recreation and culture become commercialized. In earlier stages urbanization created conditions that multiplied vice, crime, vagabondage, mob control and disease; but corrective agencies have rapidly developed until, for many cities, it can safely be claimed that they are more orderly, uniformly industrious, and healthy than countryside or village. Democracy

has its roots in family and village life, but its branching into representative government, freeman suffrage, and equal rights to community possessions has been produced in cities—first in those that waged war against feudalism. Over the world cities now lure the more energetic, the mobile, the gregarious. They impose severe strains upon the older social virtues, and fiercely demand new types.

- e. The state, formed first by necessities of defence on a large scale, by superposition of conquerors on conquered tillers of the soil and craftsmen, and later by needs of economic aggrandizement, conservation, and administration of justice, seems inevitably the resultant product of constructive forces—of advances in knowledge, communication, coöperation, inventions, and multiplication of peoples, working against the destructive forces of ethnic, economic and other forms of conflict, and the perennially dissolving tendencies inherent in local and "small group" organization. The state has had many forms, of which the city-state—Athens, Rome, Carthage,—the various forms produced under feudalism, and the kingdom are interesting historical examples; the constitutional monarchy, the republic, and the empire are the forms now highly dynamic; whilst either the reservation of partial sovereignty by smaller units purposefully and voluntarily federating (the United States, the former German and Austrian Empires) or the struggle of conquered or colonially developed units for increase of autonomy, gives us the very vital "states" of the United States, dominions, provinces, "submerged nations," seceding states (here consider Canada, Ireland, South Carolina—nullification,—Zionism, the Phillipines, Korea, Egypt, India, Poland, Cuba, etc.)

Many of the most complex of modern problems of economic expansion, increase of population, and insurance of security center in the relationships of nationalistic groups. National groups made homogeneous in ideal or composition, by common speech, religion, ethnic qualities or economic needs acquire great dynamic force, easily turn to aggressive expansion or (if under bondage) struggle for independence. If dissimilarities, real or imagined, between neighboring national groupings are marked, destructive conflict is always imminent. A nation of limited and well developed territory which combines a rapidly increasing population with rising standards of culture and living develops literally, socially explosive forces (German, Japan). Small, and especially meagrely developed, nationalities are intensely individualistic, like primitive family and clan groups, hence engage constantly in destructive conflict—Balkans, Central America, India (formerly), perhaps the new European nations. Enforced union under imperial direction often their

fate, perhaps no other course open (cf. Germany, Italy, America's Civil War, Scotland, Wales, Ireland, India, mediaeval kingdoms).

The functions of state government were originally primarily defence, then administration of justice. Follows regulation of commerce (coinage, tariffs, weights and measures, quelling of piracy, establishment of light houses), conduct of education, regulation of corporate enterprise, protection of worship (at times), promotion of colonization. Some think nations now stand at the threshold of state socialism—state conduct of economic enterprises, as transportation, distance communication, irrigation, marketing, mining, large scale production.

The forms of control for the state, ranging from dictatorships, through hereditary aristocracies, to constitutional monarchies and representative republics, give rise to endless problems of social control, assimilation, democracy. Sometimes religion, the press, and the state; and now universally the education of youth—are utilized as means of promoting the stability and experimenting with the improvement of the state. Parties form and reform about projected policies of government. Suffrage must be interpreted primarily as a means of collectively selecting and employing agents who shall give expression and application to aspirations of the rank and file. In organization as well as function the state is still endlessly experimental.

PROBLEMS FOR STUDY

(1) Describe social effects of pastoral life as to-day found in Montana, Northern Mexico, Natal, Siberia. What are nearest approximations to patriarchal organization found now?

(2) Contrast rural village life in Eurasia and recently settled North America. In states now devoted chiefly to agriculture, what are the economic and other functions of the village or small town? Show how: our government land system; dependence of frontier settlers on live stock; and weakness of Indians made founding of *farm* villages needless or difficult. What were exceptions in New England?

(3) What is "the rural problem" in the United States? Resolve it into a variety of particular problems, economic, religious, governmental, and convivial.

(4) What are the assumed advantages of "city life" to: the individual man; the individual woman (discuss according to several grades of native ability, and from standpoint of congeniality of surroundings, health, economic, possibilities, etc.); the "family group"; culture; wealth; community coöperation?

(5) Are cities or city people more "progressive" than country dwellers? Examine at various economic levels, intelligence levels, etc.

(6) What was distribution of governmental functions and responsibilities, and what was "sovereignty" among the American colonies in 1785? What was situation in 1830? 1870? 1920? What are now "debatable grounds" in the United States as between state and nation? What are now political functions of states that many would prefer to seek exercised by national government?

(7) What were some prominent "nationalistic" movements of former years? What have been some recently developed demands for "self-determination"? Illustrate from: the "making" of the German Empire, United Italy, the South African Union; and from Poland, Jugo-Slavakia, Ireland, Ukraina, Armenia.

REFERENCES: 1: 157-91; 379-88; 2:331-53; 3: 81-96; 147-68; 4: 137-159; 21: 29-74; 22: 299-334; 420-23; 23: 224-335; 718-728; 25: 350-95; 26: 243-56; 27: 451-86; Cooke; Howe; Huntington (1); Kuntz; Lee (1); Mahan; Meeklin; Poole; Powers (3); Roosevelt; Ross (3); Stone; Strong; Toynbee; Dealey; Oppenheimer.

4. Self-preservation imposes upon man the necessity of protecting himself from predatory animals, men, and weather, and of working (and fighting) for means of subsistence. As in the case of many animals, these necessities are early met by coöperation. Primitively, the horde, village, and family are economic unions no less than sociability, religious and cultural—in fact the economic need may be the most basic, the others ministering to it. The patriarchal household organizes production; the tribe organizes defensive and aggressive fighting. Advanced stages of conquest give elaborate organizations of slave labor; while the craft, religious, military, artistic and trading guilds, incipient in barbarism, develop complex and remarkably enduring forms.

a. The guild involves less of coöperative production than it does of standards and coördination of interests of allied workers in a given field. At its best it has done wonderful things through thousands of years in advancing and perpetuating standards of craftsmanship, providing vocational education, organizing markets, etc. At its worst it has become cruelly monopolistic, secretive, oppressive, parasitic and addicted to anti-social forms of consumption. Mediaeval medicine, law, commerce, education, and religion were promoted under guild forms hardly less than handicraft production; while in many respects fundamental units of military organization were guild-like in character.

b. Informal partnerships are very old, and their extensive developments a few centuries ago sometimes arose from needs of coöperative labor in production and sometimes from desire to fool capital.

- c. The corporation (or limited joint stock company), a wonderful modern growth, involves primarily coöperative use of capital in production, but becomes profitable also largely by virtue of the specialized service—from expert leadership down—which it makes possible. Its successful operation requires a maximum of documented regulations, legalistic foundations, etc. The large corporation easily tends towards monopolistic and oppressive practices.
- d. Labor unions, on a *craft* or *industrial* basis, resemble the guild in that their primary purpose is not coöperation in production, but regulation of the conditions under which workers with common interests may organize and promote these. They differ from guilds in the fact that their members usually do not contribute capital or direction to production (but note current aspiration for “industrial democracy”). At their best they raise standards, diminish destructive competition, give an intense kind of social education. At their worst they become intensely monopolistic and obstructive of real production.
- e. Modern conditions of economic production evolve many varieties of voluntary association and federation—granges, syndicates, trusts, leagues, cartels, exchanges, marketing associations, technical societies, etc. From time to time attempts are also made by consumers to organize *buying* and *standardizing* functions on some coöperative basis, cf. “Rochdale movement,” “Consumers League,” etc.). But these are still experimental as large social tendencies.

PROBLEMS FOR STUDY

1. What is meant by “economic determinism?” What is the “Malthusian Law?” Is it probable that the warlike instincts of mankind have originated in struggles for economic resources? What have been other possible origins of wars?
2. What have been contributions to human welfare from discovery and extended use of: fire; domestication of animals; domestication of plants; iron working; steam power; cold storage; money capital?
3. Why are the large commercial nations to-day competing for control of tropical lands?
4. Why is the aim of much current legislation to preserve conditions of “free competition” in business?
5. What are the “aims” of trade unions as regards their individual members? Why has government approved the formation of unions of employees in large industries?
6. What are possibilities of “coöperative utilization” beyond those now found?

REFERENCES: 1:191-220; 435-57; 2:97-149; 3:89-101; 4:97-137; 21:74-109; 22:79-116; 207-42; 25:395-428; 26:293-305; 27:486-523; Carlton; Carver; Devine; Ely; Fetter; Ghent; Huntington (2); Hunter; Lauch; Powers; Price; Rogers; Smith; Sumner (1); Tead; Toynbee; Willis.

5. The religious instincts (to project conceptions of invisible personalities into the "dark," the "void," the beyond; to impute to them beneficent and maleficent intentions and powers; and to fear, love, and strive to propitiate and coopt the beings thus conceived) are essentially social as respects unseen personalities; they also seem to require and produce various social groupings of the religious.

- a. The "Congregations" are elemental church bands for mutual stimulus and organization of worship. Intense sociability, "Christian fellowship," cultural association, sumptuary regulation, and moral control seem to attend naturally, while strong tendencies toward specialization of functions (leadership in ritual, preaching, administration) tend generally to appear. Federation produces sects, denominations, historic "churches," and often tendency is towards centralized control, theocracy, crystallization of ceremonials, creeds, and moral dogmas. Beliefs in distinctive spiritual beings and in future life powerfully influence imaginations and can readily be used as means of shaping and controlling all kinds of behavior; hence religion becomes at certain stages, a socializing agency no less potent than family, community, or vocation. But science diminishes anthropomorphism in religion and relaxes its specific, and especially its traditional, controls.
- b. Differences of creed and objectives becoming tied up with other differences—ethnic, cultural, nationalistic, even economic—give sanguinary fierceness to competitions and wars, especially when mediaevalism was able to beget profound and concrete faiths. Political organization and religious organization long warred for supremacy, with victory for the former, as the scientific "spirit" and aspirations for democracy prevailed.
- c. Specialized religious groupings carry to highly developed forms certain qualities and aspirations, often sporadic in all societies, celibacy, poverty, asceticism, devotion, "good works." At certain stages each of these probably effects valuable contributions for society as agencies accepting specialized functions—monastic orders, religious "knights" (of the post-crusade period).

PROBLEMS FOR STUDY

1. Trace stages in evolution of a modern "church" or faith, e.g., Mormonism, Unitarianism, Christian Science.

2. Diagnose difficulties produced when ethnic, political and religious differences merge in opposing groups—Armenians *vs.* Turks, Irish *vs.* English, etc.

3. Show how large and persistent religious groupings affect social control.

REFERENCES: 1:239-71; 2:353-72; 3:129-41; 4:115-37; 21:632-52; 22:239-54; 23:482-501; 686-705; 25:196-257; 27:364-99; Coe, Matthews, Tyler, Wallas.

6. A custom-based social order (barbarian and "mediaeval" civilized) refuses willingly to tolerate far-reaching or organized differences of aspiration, thought or action, hence gives scant place for parties, sects, cults, "schools," associations for propaganda, or "issues" generally; but widespread movements for democracy and freedom of thinking evoke and, almost necessarily, tolerate these social groupings in endless variety. Many are shortlived, some protean. Nearly all have a few primary objectives, aim at propaganda, and seek purposive groupings of those originally, or by conversion, "like minded." These organizations, more often fluid than crystallized, serve as ferments for new ideas, as screens for old, and the incessant emulations and minor partisanships they create perhaps move toward purposive control of evolution (telic progress). But they now obviously involve marked dissipations of social energy and cause stimulation of small no less than large, malevolent no less than benevolent, spirits. But like the agitation of waters, they perhaps serve well to prevent corruption, to promote various kinds of wholesomeness.

- a. Political parties are the natural production of republicanism, political freedom, experiments in combining democracy and effective political organization. Numberless varieties of purposive social groupings, collective (state) control of partisan excesses ("politics"), civic education (publicity, propaganda), individual ascendancy, and social control can profitably be studied in political parties, which are, in western nations, among the most dynamic of contemporary groupings.
- b. As religious, economic, cultural, and other groups expand from an associate to a federate comprehensiveness, "parties" are often formed about differences of policy or practice. These may produce rifts (sometimes in associate, more commonly in federate, groups) from which come sects, denominations, etc.
- c. Certain factors or cohesives in the social order of a given society are looked upon as essential—patriotism, religious orthodoxy, republicanism, private property, the monogamous family, racial purity. Parties, cults, or "isms" formed to oppose these become objects of intense hostility, and especially from the chief beneficiaries and convinced supporters of the approved order. Under these conditions strong tendencies towards per-

secution, intolerance, denial of freedom of speech, press and assemblage, are observed even in societies strongly cherishing freedom of conscience and thought as general principles. In these struggles about fundamental social values may be studied profitably elemental conflicts, suppressions and controls.

PROBLEMS FOR STUDY

1. What have been, historically, the usual aims of various forms of persecution? Analyze various types—ethnic, religious, political, economic, caste, sumptuary, sex, age. Distinguish between persecution that seeks to eliminate the opposed persons, and that which seeks to exploit (or “use”) them.
2. Describe the essentials of tolerance, fair play, “America first,” found in the American political party system.
3. Why do Americans strive to prevent mixing of religion and politics in party systems?
4. Describe the varied and numerous “voluntary” groupings found in a city of your acquaintance to promote “worthy ends.”
5. Discuss current social tendencies as to freedom of discussion and party action and the reverses.

REFERENCES: 1:220-39; 283-316; 399-414; 3:101-147; 168-192; 159-175; 21:357-431; 22:137-53; 386-400; 23:482-524; 25:325-76; 27:451-86.

Bagehot; Carver; Eliot; Hadley; Kropotkin; Lee; Riis (1); Ross (5); Stone; Veblen; Vincent.

7. The pursuit of “social relaxation,” social diversion, amusement, and conviviality (here comprehensively called “sociability”) gives rise to a large number of forms of social grouping, some of which are very persistent. These usually are not highly organized from within, but when elaborate organization seems needed, it is undertaken by specialized agencies on a commercial basis—cf. the saloon, the theatre, music hall, gambling house, the moving pictures (but note, on the other hand, men’s clubs). The quests of “sociability” readily leads to dissipation of energies and wealth, to sex vice and personal conflict, hence conservative individuals and groups wage war on them. Youth, unemployed women, unstable elders, persons aesthetically sensitive, seem especially to crave large measure of the various forms of sociability and hence draw down on themselves the maledictions of those preoccupied with the serious constructive activities of life. When wealth becomes plenty and security seems assured (or at the opposite extreme, unattainable) the convivial assume ascendancy (cf. many periods in history) and are fought as wastrels. Sound social valuations are here very obscure. Many degenerative tendencies in society unquestionably are accompanied by disproportionate addiction to sociabilities of hurtful kind.

PROBLEMS FOR STUDY

1. Describe agencies of "commercialized amusement" in a modern city.
2. Describe close connections of vice with sociability agencies.
3. What is "Epicurean philosophy?" "Stoic philosophy?"
4. Review efforts to provide wholesome diversion in American cantonments.

REFERENCES: 1:329-49; 3:101-117; 4:78-97; 22:113-130; 377-88; 25:257-325; 27:263-306.

CHAPTER III

SOCIAL FUNCTIONINGS

A. SOCIAL EFFICIENCY

Every adult member of society, under the pressures of felt needs, instincts, and the influences exerted by his fellows, strives toward self-realization and the conservation and improvement of the conditions affecting him. Due to similar pressures he strives to affect others—to help or to hinder, to repel, or to coopt, to love or to hate them.

Social evolution enlarges group areas of collective action (latitudinal social expansion) and the accumulated social inheritance (longitudinal or chronological social expansion). Hence individual strivings for efficiency merge increasingly into collective strivings on the part of social groups. Aspirations, policies, and programs of groups for social efficiency thus appear.

At first these are largely by-products of unreflecting experience, sometimes made luminous and striking by the interpretative powers of genius, and incorporated into customs, traditions, codes. But increasingly they are characterized by collective consciousness, wider purposiveness, scientific evaluation. Blind progress gives place to purposive progress (see Ward's telic progress) in "spots." ("The twentieth century has appeared in only a few places as yet.")

Social efficiency¹ is now pursued along lines—sometimes by letting individuals or voluntary groups pursue their own ends, with society in some collective ways holding them to the "rules of the game," as in the case of economic production, family rearing, religious observance, invention, and the reorganization of customs; and sometimes by "public" collective action, as in defence, government, education, and sanitation. To the promotion of social efficiency almost all kinds of knowledge can be made to minister. In so far as sociology, the most inclusive of the social sciences, and the most purposively "social" of all the sciences, extends our vision of what constitutes true "social efficiency" or mastery of practicable working objectives towards it, then do the "applicants" of such sociological knowledge become important in pursuit of social efficiency. Education, especially of the young, is one of the most effective means of making such knowledge socially "functional."

(1) The term "social efficiency" will be here used to include *all* kinds of desirable and effective social activities. An efficient individual, in any adequate meaning of the term, is effective in economic pursuits, in conserving and improving his health, in rearing a family, in enriching his own personality, in co-operating with his fellows, and in serving his maker. In similar broad sense, "social efficiency" results from collective pursuit of all desirable ends—economic, religious, civic, educational, cultural, physical, etc. The term "social economy" has sometimes been interpreted to have the same scope, but it has obvious limitations. The term "applied sociology" has also been urged, but it is open to the objection stated in first chapter to all "applied" subjects. "Social well-being" can advantageously be taken as a colloquial synonym.

Sociology gives as yet no adequate analyses of the components of "social efficiency." The "values" that men, individually or collectively, strive after may be helpfully considered under such categories as: security, health, property (wealth), family, righteousness, companionship (including communion with beneficent deities), knowledge, beauty. A cross section of any dynamic society to-day shows that among the activities ministering to social efficiency, the following have obviously important connections with education: defence (war), social control (including maintenance of order, and good citizenship), economic production, extension of knowledge, promotion of health and beauty, conservation and elevation of family life and racial heredity, upholding of religion, advancement of democracy, etc.

The problems of social efficiency (and hence in large part of education) arise in part from present ignorance of how to realize aspirations suggested by the above categories; but in part they arise also from our present inability to find correct balances (optimum resultants) among several more or less conflicting values. Endless limitations, innate and environmental, affect man—the life span, the physical powers, and the educability of the individual; as well as the habitable surface, the controllable forces, the accessible resources of earth. Is it "best" that a given portion of earth's surface should be occupied by many people with a low standard of living; that the "individual" should sacrifice happiness heavily for the present and future good of the "large" group; that a man should amass wealth for himself and his even at some sacrifice of health; that "national honor" should be conserved even at great sacrifice of life; that much of the time and energy of the average individual should be devoted to the pursuit of that knowledge, beauty, and communion with God which yield no "visibly practical" returns? It is essential that that study of social efficiency which is designed to define objectives for education should carry analysis of these problems as far as practicable.

Obviously only partial analyses of major groups of factors making for social efficiency can yet be achieved. For some purposes these factors seem to suggest *final ends* of social effort—in the domains of religion, security, pure knowledge, pure beauty, health, and heredity; in other cases, they are commonly accepted as means to other ends—in the domains of economic production, social control, and education. But, more fundamentally, the sociologist regards even religion, security, health, knowledge, and beauty as being more often means than ends, both of unconscious and of conscious social evolution. Provisionally, therefore, analysis may undertake to set forth (1) certain problems of remote goals; then to treat, in possible order of appearance as conscious goals of collective action, such major factors as: (2) defence (against competing human groups); (3) social control (within coöperating groups); (4) economic production (5) religion (6) pursuit of knowledge; (7) pursuit of beauty (8) pursuit of health (9) improvements of stock; and (10) individual self-realization (democracy); and finally, as a major means, (11) education.

REFERENCES: 1:271-316; 349-79; 425-35.

Bagehot, Crain, Davenport (1), Devine, Gulick, King, Roosevelt, Saleeby, Wallace (1), Ward (2).

B. GOALS OF SOCIAL EFFICIENCY

Sociology knows little as yet of objectives of social efficiency beyond those to be derived by projecting forward evolutionary tendencies already established and recognized. Like other organic species man seeks to multiply, to possess the earth, to crowd out competing forms of life (weeds, wolves, flies, bacteria, even other humans), and so to adapt himself to different environments as to render further multiplication possible. He strives for security, health, happiness. He far transcends all animals in building, transmitting, and using his "social inheritance" and in projecting goals towards which he strives. Hence the accumulation of knowledge, the production of beauty, and preparation for the immortal life beyond, have become engrossing social pursuits. The pursuit of remoter goals has in many cases become closely incorporated in the instinctive life (multiplication, conquest, property possession) of all; or it results from that variability in human offspring by which exceptional individuals (inventors, pioneers, artists, devotees, leaders) appear; or it may arise from social crystallizations about obscure instincts (religious movements, migrations). Among these remoter objectives of social evolution which well repay philosophical analysis are these: (1) Where does nature, and where should man, find optimum resultant between *quality* and *quantity* of human life? (2) Where does nature and where should man find optimum resultants as between the individual and the group? (3) What are probabilities that existence after death is of such character as greatly to repay conscious preparation therefor in this life?

1. The natural tendency of human life is to multiply in geometric ratios. But hunger, disease and war act as positive checks. Nearly half the human race now live "under the monsoon." The Sahara Desert, Labrador, Nevada, the Andes, support very few men. Where population grows dense, disease in the past has flourished. Nature has endowed man with strong instincts of conquest as towards other species; but, what is less common in the animal world, with strong instincts to conquer from his fellows also. But organization and invention have helped men to multiply. Organization eliminates war as between local small groups, makes accumulation of property possible, and helps the stemming of disease. Domestication of rice and buffalo make the "teeming Orient" possible. Western European civilization has grown on wheat, cattle, iron, and ships. Maize and the bow and arrow made settled life possible to aboriginal America. Germany, England, Massachusetts, Japan develop dense populations around manufacture and export.

Recently have appeared voluntary checks on population. In western nations standards of living now war on population increase—giving celibacy, postponed marriage, infertility, birth control, "race suicide." Perhaps polygamy insures larger numbers, but monogamy superior quality,

of offspring. Wealth and its attendant exaltation of pleasure as an end seem to extend prostitution, infertility, subnormal families. Intensification of parental interest, thrift, and forethoughtfulness generally, favor small families among superior stocks or social levels. Traditional religion strongly resents voluntary curtailment of family, except for religious ends. Quite probably, out of numberless conflicting and confused tendencies, are even now being evolved foundations of conscious policies soon to be generally accepted.

2. Membership in, and sharing responsibilities of, group life usually both helps and hinders the individual. The hindering often seems to touch most those values that are immediate and insistent to him; and the helping, the more remote and, perhaps, less interesting, values. Individualistic and "small group" instincts are always somewhat at war with social (or large group) requirements. The family, the community, the union, the church, and the state (especially when under pressure for unity in defensive action) tend to restrict the individual to industry, education, routine, conformity, sacrifice. They deprive him freedom, play, gang associations, self-aggrandizement. All existing social adjustments exhibit endless compromises here—these being often obviously provisional and opportunist.

The ideals of liberty, democracy, social efficiency, and Christianity incessantly force education (as well as government, industry, worship) to try to discover fundamental laws or principles here. The social metaphysics of recent centuries seeks refuge in formulas, panaceas, and vibrates from pole to pole of faiths. But new factors constantly supervene. Other things remaining equal, would doubling the population of the United States increase or diminish the "large group control" which seems, and often does, cramp the individual?

Would great improvements in social education enable the individual gracefully and normally to accept needed restraints and to find satisfactions in lines of "socialized" freedom left open? Is a large measure of individual freedom practicable if organization for maximum economic production (or defensive war) becomes necessary?

Of the same kind are problems of small (and relatively "natural") groups as against large (and relatively artificial—"art made") groups. Enlarging national areas seems to make for peace, acculturation, economic development. It suppresses "small nations," local independence, etc. Should South Carolina be permitted to become a "small nation"? South Ireland? Scotland? Hawaii? Should India, Egypt, Canada, Korea become completely sovereign? Could they use such sovereignty advantageously to themselves or others?

3. Peoples and eras vary greatly as to their definiteness of beliefs and conceptions of "life beyond." Beliefs in personal immortality figured only slightly in Old Testament theology, but very extensively in Christianity. India thinks much in terms of continued life; China apparently but little. For long periods Europe made mundane life largely apprentice-

ship for the career after death, a social situation which profoundly affected education. Modern "intellectual" man, enlightened by science, discards anthropomorphic deities and holds less to a strictly personal immortality; but he evolves serener beliefs in great causative agencies and in the essential wisdom, economy and purposiveness of the "order of the universe"—attitudes which may easily be made to mean much to education for the "higher" social efficiency.

REFERENCES: 1:541-65; 414-25; 2:372-97; 3:268-97; 4:21-42; 21:3-29, 22:416-23; 23:705-29; 25:417-43; 26:94-117; 27:364-99.

(References at end of chapters 14, 15, and 18, Dewey and Tafts, *Ethics*), Munsterberg, Cooley (2), Small, Wallace (2).

C. DEFENCE AND AGGRESSION (WAR)

Far back in social evolution men learned to contend destructively with others for territory, wealth and women. Family and other groupings contended in collective capacities and war imposed more stringent needs for tools and organization than did conflicts with animals or the forces of nature. Defence against human foes becomes the first essential in collective promotion of security, and easily leads to organized aggression. War thus becomes a potent, if not the most potent, agency of natural selection (sometimes eugenic, sometimes dysgenic, by modern standards of social values) and of that social selection which produces effective tools, organized experience, and closely coöperative groups. Internal social control, religion, economic and health efficiency, aesthetic appeal, science, and education become the indispensable means to survival. History can vision along roads of social evolution an endless wreck of stocks and of social systems which were burned up rather than refined in crucibles of war. Some important considerations are:

1. Primitively war seems usually to result in total destruction of opponents; next children and women are saved and incorporated into conqueror's group; then men also are saved for slavery; and finally the conquered are left in secure pursuit of their own economic activities, but under conditions designed to give the conquerors direct or indirect benefits. A different stage is sometimes discernible in which the conquerors are gradually assimilated by the conquered.

Some believe that many of the institutions characteristic of civilization originated in the necessities of that conquest which aimed to keep the subjugated highly productive, e. g., governmental administration of justice, property in land, capital, organized education (of rulers), systematized taxation, and corporate promotion of art, science, the arts, elaborate ceremonial, etc.

2. Nations result from the organized consolidations of social groups under pressure of war. Progress seems to give larger national units and retrogression disintegrates—but whether for good or ill is still a problem.

3. Often war is so destructive that net good comes to none engaged. Perception of this fact, together with experience obtained in administer-

ing large nations, sometimes of very heterogeneous social elements, gives rise to aspirations for total cessation of war, for international coöperation in administration of justice, etc. It is probable, too, that war on scales made possible by modern conditions is not eugenic as to stock or advantageously selective as to social inheritance. But to maintain effective "preparedness for war" may give motives for internal harmony, economic efficiency, maintenance of physical well-being, and for genuine education obtainable for the present in no other way.

REFERENCES: 1:283-316; 388-93; 499-513; 3:316-23; 22:299-322; 23:183-213; 357-97; 25:376-411; 27:73-913.

David, Giddings, Jastrow, Keller, Maine, Marshall, Oppenheimer, Powers (2), Ross, Todd, Wood.

D. SOCIAL CONTROL

Social groups have longer life than individual members composing them. Man is only partially fitted for group life by his instincts; and for the highly artificial groups produced by civilization, his instincts are largely inadequate. Hence social control—the complex of processes by which groups adjust new members, and by which large groups adapt and hold small groups to courses of action believed to be for the general good.

The central difficulty in social control arises from conflict of individual (or small group) felt interests with larger social needs. The individual *feels* the need of freedom (from constraint, routine, steady work), property, sex, destruction of opponents. His small groups want to take, but not to give, to be secure, self-centered, aggrandizing. Within limits set by the needs of others these instincts and easily formed social valuations are normal and socially sound. Their operation may be observed in any family, village, school excursion or crew.

Social control is achieved mainly through shaping the aspirations, knowledge, habits, appreciations and ideals of the young (during that "prolonged infancy" when youth is plastic to impressions produced by elders, imitative of example and of approval of superiors); and by external restrictions and directions imposed on imperfectly socialized adults—taboos, conventions, customs, rules, regulations, laws, constitutions. The "small group" and individualistic virtues can best be inclusively designated as "mores," or morals; the political small group virtues, "justice"; the "state group" virtues, citizenship; and the "deity group" virtues (i. e., man's relationship to deity), piety, holiness, or religiousness.

The specific objectives of social control are as numerous as social groups, and the standards of social efficiency held on behalf of them. The individual is subject to conflicting "pulls": (a) What shall he give (of submission, service) to others that will leave him an optimum measure of development, personality, individuality? (b) How shall he apportion his submission and service among various groups—family, community, union, church, state, etc.—so as best to serve all? (c) How shall he act when "small group," and "large group," interests conflict? So arise end-

less problems of "duty," or "right and wrong," of ethical or social standards.

The experience of the race or of divisions thereof, has long given qualitative definition to scores of virtues—filial, parental, marital, fraternal, communal, martial, vocational, sumptuary, civic, patriotic, religious, altruistic. (These may profitably be investigated by organizing the experience of each one of us around popularly approved ideals of virtuous and vicious conduct for various kinds of social membership, e. g., the "bad son" is—; the "good son" is—. Similarly list numerous virtues (and their opposites characteristic of the "bad" type) of the good: father, mother, husband, wife, brother, uncle, fellow workman, friend, employer, employee, soldier, worshipper, voter, ruler, elected official, fellow passenger, scholar, teacher, man as consumer, man as reader, man as citizen of a municipality, man as citizen affecting action towards other peoples, talented man as altruistic giver of gratuitous service to others.

But the ordinary moral categories are unsatisfactory (for the study of true social control, and for education) because: they are not concretely related to definite social groups; they take no account of the variabilities (as to educability, conflicting tendencies, social influence) of different individuals; and they are lacking in quantitative definition. Hence social (moral, civic, religious) education is to-day the theater of endless writing and discussion that is Utopian, aspirational (only), unproductive. Primitive and mediaeval education for social control suffered less from this because of the ultimate definiteness of its taboos, dogmas, mandates, as resting on authority; but we now seek ends of social control concurrently with striving for freedom of thought and democracy. The task still remains for sociology (as applied in social efficiency) to provide properly balanced schemes of objectives for social control.

The specific *methods* of providing for social control are many:

- a. Instincts of fairly definite character motivate and direct certain forms—love of mother for child, love of man and woman, fraternal affection, gang and clique membership, sociability, pity, sympathy.
- b. Instincts of an inclusive character are given specific direction by elders and superiors, for sake of motivation; fear (of blame, corporal punishment, fire of Sheol, jail, loss of property, loss of friends, etc.); love (of approval of superiors, of success in competition, of acquisition of property, of noteworthy achievement, etc.); submissiveness to authority (of parents, elders, priests, institutions, tradition) which sways especially appreciations and ideals (and crystallizes into habits, attitudes, fixed valuations; imitativeness, curiosity, workmanship, aggressiveness, etc.
- c. As experience defines forms of approved or disapproved social conduct, taboos, commandments, laws, conventions are given shape, often highly specific. "Thou shall not steal"; the dance

must have a chaperon; usury is unlawful; no law shall be passed abridging freedom of speech.

- d. Ceremonial is a valuable means among the ignorant or those easily accessible to emotional stirrings. Ceremonial garments, rituals, pageants, imposing buildings are examples. (Trace useful and, possibly, useless survivals in modern life.)
- e. Art that strongly stirs appreciations (musical, visual, literary, and in vanishing degree, gustatory, olfactory, and terpsichorean) is used as a means to exalt or suppress tendencies to social or anti-social action (cf. patriotic music, painting, sculpture and architecture; religious music, incense, graphic art; music exalting fine love between sexes; stories of filial obligation; etc.).
- f. Enlightenment, giving extended social insight, becomes a modern means of transcendent importance.

REFERENCES: 1:51-67; 349-73; 478-99; 2:51-97; 3:175-221; 4:244-65; 21:581-96; 22:334-54; 23:653-86; 25:1-77; 27:171-201.

Addams (2), Bradford, Breckenridge, Dealy, Ely, Fiske (2), Ghent, Kropotkin, Lavelle, Maine, Poole, Ross (1), Smith (2).

E. ECONOMIC PRODUCTION

Primitive man depended, for food, shelter and tools, upon the "bounty of nature." Modern man tills the soil, raises domestic animals, mines ores, manufactures numberless articles of necessity or luxury and organizes exchange of commodities and services at near and remote ranges. Especially significant sociologically is his harnessing of natural forces. The "will to live, to multiply and replenish the earth," is thus made possible largely by economic inventions, conservation of goods, and subdivision of labor. Modern developments of economic efficiency now command attention and effort so largely that careless thinkers identify economic with social efficiency.

The possession of economic resources is basic to other forms of well-being; hence any increase of population or rise in standards of living produce economic pressures which frequently lead to mass or collective movements of peoples. Some scholars interpret "economic determinism" as the most fundamental fact in the making of history as we know it—a history of conquest, of vast migrations, of exploration and settlement, of perennial conflicts for rich valleys and commercially strategic positions, of centralized governments formed about rich areas, of industrial exploitation, of emergence of the economically oppressed. "All great wars are rooted in economic conflict."

Many modern social problems originate in the "industrial revolution"—less than two centuries old—which involves substitution of power driven machinery for hand labor, specialization of productive processes among workers, widespread regional specialization of basic production, congregation of workers, corporate ownership and control of production, wage-earning (and therefore regimented) work of women and children, gov-

ernmental oversight of trade and production. Modern problems of politics, internal as well as external to nations, rest heavily on economic issues. Socialism transmutes economic aspirations into something akin to religion, with its own earthly beneficent and maleficent deities and heaven.

Under primitive production, producer and consumer were the same or in intimate juxtaposition. Under modern production they are commonly far removed and unintelligible to each other. Similar chasms now exist between employed and employing workers. Hence endless misunderstandings, development of deep-seated convictions as to the malevolence of "the other," and erection of militant organization to secure "justice." Especially is it felt that efficiency in production is not paralleled by economy or fairness in exchange. Equally widespread is conviction that "value of product" is not fairly distributed among agencies producing—capital owners (rent, interest), enterprisers and risk takers (profits), and labor (wages). About these issues are waged endless destructive conflicts, threatening to become wars. Demands for governmental supervision, direction, control are incessant and impose wholly new strains on political organization.

Basic principles of economic efficiency are obscure. Granted governmental supervision adequate to insure "fair play" and prevention of monopoly, should free competition of effort and free operation of law of supply and demand be allowed to determine prices, wages of adult workers, rewards of capital and enterprise, supply of products? Would courses based on other principles,—e.g., the socialistic ideal of workers compensation "to each according to his needs, from each according to his abilities"—presuppose powers for collective action now non-existent?

The effects of modern production on individual well-being are in dispute. Within limits it is desirable that "the maximum of economic goods, for least effort" should be the economic goal of individual and social group production. But this good may be purchased at too heavy a price in health, family life, culture, sociability, interest in beauty, or religion. It is alleged that existing conditions "mechanize" workers, stifle inventiveness, render life sordid, impoverish interests in culture, beauty, worship. Does comparison with past ages or with peoples now hardly touched by the "industrial revolution" bear out these contentions? But final valuations require that we should take numbers as well as qualities into account. Only machinery, trade, corporate production, great specialization of process makes Rhode Island, the "Black Belt" of England, Belgium and Chicago possible. Legislative control tends steadily towards reduction of working day and week, higher minimum age of entrance upon full-time work, regulation of hours of women's labor, improvement of sanitary conditions, publicity or corporate action. Can adequate correction of ills of mechanized production be found along those lines? Are more comprehensive methods practicable? Does "industrial democracy" represent feasible ideals?

Conflicting aspirations for economic efficiency are commonly implicit and sometimes explicit in nearly all contemporary social thinking: (a)

Hopes that control of power, applications of science, and harmonious organization of agencies of production will so go forward that "the yoke of toil" shall be taken off the neck of the race. (b) Desires that old conditions of production—handicraft (the artist's dream), rural, individual, be restored. (c) Aspirations for the democratization of production.

Several facts of importance to sociologists require consideration: (a) Standards of utilization are rising wherever economic production grows. Better and more foodstuffs, housing, clothing, means of amusements, education and opportunities for relief from arduous toil are demanded. (b) For purposes of general consumption, and especially in time of war or other social need, popular demand is for "quantity production" and of "standardized parts"—whether of wheat, sugar, canned fruits, cotton cloth, steel rails, phonograph records, furniture, shoes or of houses, pictures, cars, or clothing. (c) Social workers—using the term inclusively to cover preachers, teachers, reformers, relief workers, writers and others in whom social sentiments bulk large—are quite generally emotionally hostile to all those factors which seem closely associated with modern "large scale" production—corporations, machine production, standardization of product, subdivision of productive process, the entrepreneur's vocation, free play of normal competition, and free operation of the law of supply and demand in regulating prices, wages, interest, profits, regional specialization of production, congregation of workers, scientific supervision of work, etc. (d) Widespread discontent among workers, investors, and consumers seems to grow rather than lessen and it becomes of supreme importance to discover whether it is chiefly unjustified discontent with the inevitable limitations of nature and man, or discontent with remediable, man-made, or at least man-permitted, conditions.

The possible effects of modern economic conditions on education are several: (a) Where they increase individual productivity and thrift, they extend, in time and qualitatively, possibilities of all kinds of education. (b) For many, perhaps all, vocations called for in specialized and scientific production, school vocational education (instead of "by-product" training) becomes highly remunerative to the individual and to society. (c) The social complexities produced impose heavy responsibilities for civic or social education adequate to give true appreciations (for civic conformity and voting) and powers of execution (criticism, leadership).

REFERENCES: 1:51-67; 349-73; 478-99; 2:51-97; 3:175-221; 4:244-65; 150; 22:334-47; 27:486-571.

Abbott, Bailey, Bogart, Clay, Country Life Commission, Devine, Ghent, King, Lauch, Lavelle, Price, Rogers, Smith (1), Streightoff, Tead, Toynbee, Veblen, Willis.

F. RELIGION

In broadest sociological sense religion embraces man's relations with unseen personalities or conscious agencies. Very early in the evolution of intelligence (especially creative imagination) man peopled the darkness, the distant reaches, the hereafter, with personalities, some benevo-

lent, some malevolent, some neutral. To them he imputes actual or potential intervention in human affairs. Naively he interprets them in terms of his experience, imaginatively exaggerated or minimized, thus giving: deities like great men, fine women, lovable children; malevolent beings like criminals, unlovely women, malicious dwarfs; dragons (combining fearsome attributes of wolves and serpents); heaven as a fair land; sheol as a fiery and dry place of torment.

In this sense all peoples at all times have had religions. Doubtless there are instincts, vague but imperative, forcing projection of conceived personalities into inaccessible places or conditions of universe; and welcoming the rebound of their influence on aspirations and conduct. Perhaps these instincts are part of man's general powers of projecting ends which react on behavior—become goals towards which he aspires, or conditions which he must avoid. "The fiend that man harries is love of the best." "Man never is, but always to be, blest."

Religions faiths and beliefs—fear or love-inspiring, and interpretative of true justice, admirable qualities of character, serene and wise purposiveness—have always been used as powerful agencies of social control, with especial effect in areas of secret action, invisible purpose. In primitive stages of social evolution fear, vengeance, material comfort are characteristic means of appeal; in later stages, love, altruism, restfulness, impersonal justice.

Widened experience and increase of scientific knowledge destroy credibility of anthropomorphic divinities and fiends—religious beliefs necessarily become abstract, rationalized. But children, and adults of low intelligence, learn through the concrete, the anthropomorphic; and respond, in fear, love, and ideal, chiefly to personal, or "human" conceptions of supernatural beings." Hence increasing difficulties under modern conditions of preserving realism of religion in education, social control, and elevation of the young, and of adults not abstractly imaginative.

Hence strong trend in all current movements towards religious efficiency to center ends in social efficiency—on assumption that social well-being on earth (of the best sort) most nearly accords with divine will.

REFERENCES: 1:220-271; 457-78; 4:115-137; 21:551-81; 22; 137-53; 23:-640-53; 25:126-218; 27:337-64.

Churchill, Coe, Cooley (1), Davenport (2), Ellis, Mathews, Taylor, Tyler, White.

G. KNOWLEDGE

The accumulation, organization, and interpretation (in terms of relations and of values) of the facts of experience become early in social evolution a necessary means to many kinds of social efficiency. But in the individual, feelings (aesthetic and other) and faiths tend constantly to color and distort perception, and especially interpretation, of facts of experience. Science emerges only when knowledge becomes largely refined from feeling and faith elements. Hence for long periods upholders of institutions resting on faith (religion, various forms of social control,

healing) and aesthetic apprehension have resisted scientific inquiry—which, in initial stages, is often more socially destructive than constructive.

But at intervals in the past, and conspicuously in modern times, the pursuit of scientific knowledge becomes a great collective purpose,—naturally first in those areas where institutions closely interwoven with cherished faiths are least developed, or where such institutions first give way because of ineffectiveness. Hence war, economic activities, and health conservation are first areas for application of scientific knowledge; social control and education are next; while aesthetics, genetics, and religion will come late. But in the meantime "pure science" develops in all fields of nature—physical, biological, psychological, sociological; and from the many "pure sciences" are increasingly being drawn the undisputed facts, demonstrated relationships, and tested evaluations which give to society "scientific efficiency."

REFERENCES: 1:329-49; 393-9; 2:353-72; 3:268-97; 4:339-62; 21:652-91; 22:132-153; 23:626-53; 25:257-325; 27:306-37.

Duncan, Morris, Wallace, White, Williams.

H. AESTHETIC EFFICIENCY

Man inherits a variety of instinctive preferences called aesthetic, some of which are, or have been, definitely related to survival and some of which are alleged to be "goods" or "values" in themselves, independent of racial or individual survival. The aesthetic preferences are characterized by strong feeling perceptions, commonly through the senses. For convenience aesthetic experiences may be grouped as:

- a. The tactual, where the "feel" of articles touched gives aesthetic sensation.
- b. The gustatory, associated with flavors of foods, drink, and a few other objects.
- c. The olfactory, as given by odors, scents, perfumes, etc.
- d. The visual, involving especially harmonies and associations of form, color and motion.
- e. The auditory, involving especially harmonies and associations of sound.
- f. The imaginary, involving agreeable memories and obscure harmonies only remotely affecting or affected by sense perception.

Few valuations representing important collective judgment to-day attach to aesthetic appreciations on tactual, gustatory and olfactory planes. On certain sumptuary planes, "pleasures" are sought in foods, drink, perfumes, fondling, but these are usually regarded as "sensual," degenerative. Possibly these sensual pleasures once had survival values in stimulating right, and repressing wrong, courses of action. Certain refined interests towards "educative" aesthetic sensibilities in these areas are to-day associated with high standards, but probably in no vital manner.

Aesthetic sensibilities in visual, auditory, and imaginative areas seem

to make appeal (as lure or repellent) on two psychologically distinct (though often blended) grounds, one associative, the other intrinsic. Certain harmonies of sound always give pleasure, apart, apparently, from all associations; whilst other sounds, not always harmonious, give pleasurable emotions, commonly called aesthetic, by virtues of the memories, the associations they recall. (Note difference between "good" and "popular" music.) Pictures, statues, decorations sometimes give lively satisfaction because of intrinsic "art qualities," sometimes for the associations they inspire. The same seems to be true of pure "literary art"—poems, stories, essays; as well as of the complex fine arts—drama, song, opera, photodrama, dancing, architecture, pageant. The distinctions here suggested are of the utmost importance to all efforts at discovering and utilizing the "social values" of the arts that make aesthetic appeal. Sociology seems to possess little light as yet on the aesthetic values.

REFERENCES: 1:191-206; 329-49; 21:490-508; 25:234-291.

Haddon, Morris, Powers, Tolstoi.

I. SOCIAL EFFICIENCY THROUGH STOCK

1. The organic foundations of *all* qualities in the individual that make for personal or social efficiency are found in the inherited or original nature of man. The character, possibilities and limitations of some inherited organs and functions are easily observed and described—bodily size, strength; hairlessness; uprightness of stature; flexibility of thumb, vocal organs; instinctive curiosity, acquisitiveness, pugnacity, fears; educability in mathematics, music; etc. Others are yet obscure, even though unmistakable, in their effects. We know that all persons are in greater or less degree: resistant to various diseases; inventive; possessed of instincts of workmanship, worship, altruism, aesthetic appreciation, and parental devotion; capable of being trained in complex skills; endowed with possibilities of longevity, etc. Individuals obviously vary greatly as respects their inherited possessions of the organic foundations of these qualities, and it seems very probable that family groups, geographic groups, and racial groups, vary also. These differences, in so far as they are persistent, have been the products, chiefly, of biological evolution—appearance of mutants, natural selection, survival of the best adapted (to the existing material and social environment). If a proper comparison of the "Nordic" or other northwestern European stock with a Congo negro stock shows the former to be "superior" to the latter in pugnacity, mechanical inventiveness, powers of forming and capacities of accepting government, devotion to monogamous family, etc.; and "inferior" in resistance to malaria, in love of rhythm and powers of singing naturally in harmony, and in submissiveness to slave labor, then we must assume (on the hypothesis of a single origin of the human species) that these differences of stock have been produced by selective evolution actuated by environment.

2. Are human "stocks" being improved by natural selection at the present time? And is it practicable artificially to improve existing stocks as respects their biological qualities? These questions are of great interest

and are probably destined to receive prolonged study. But it is practicable here only to suggest some of the specific problems involved:

- a. Wherever an agency of selection operates freely among a people in such a way as to prevent certain kinds of individuals from having progeny, then, other things being equal, it is probable that the "stock" is being "improved" in the direction of the qualities of those not eliminated. Diseases of childhood, prostitution, possibly alcoholism, peripatetic labor, tuberculosis, doubtless tend to elimination of weaker strands; similarly the spirit of adventure, forest dwelling, earliest pioneering, social ambition, the fastidiousness of the over-refined, religious monasticism, and (under some economic and ethical conditions) venereal disease, tend to withhold progeny from stocks or strands esteemed as "strong." It is a plausible hypothesis that in all economically advancing countries during the last fifty years desired "standards of comfort" are eliminating certain superior strands through "differential race suicide." But in all the cases given, variable or offsetting factors may yet be defined.
- b. Wherever peoples of differing religions, races, standards of living, or interests in congregate life live side by side, selection favors the type that brings to maturity, and parentage in turn, the largest numbers. It is alleged that among Catholics and Jews large families are favored more than among Protestants; that Alpine and Mediterranean stocks have been more prolific than the Nordic; that rural dwellers rear more and better offspring than urban dwellers; that suburban or middle class people represent the best stock and the lowest fecundity now found. Other factors are: prevailing age of marriage (an average age of marriage at 20 could give five generations in a century, whereas at 25, four); the high child death rate in large families of poor (Russians, negroes, Chinese); the relative sterility (alleged) of educated, refined and other women whose "work" has been chiefly intellectual; residence in the tropics as contrasted with same in colder regions in producing irresponsibility towards thrift, fecundity, etc.; the constantly increasing economic burden (especially on the father) of child rearing, imposed partly by custom, partly by law.
- c. Where peoples do not interpenetrate (India and Europe, China and America), the more prolific may be in process of more rapid evolution than the less (doubtful at present).
- d. Certain kinds of eugenic selection have long taken place in formation of families: (1) Probably the well-born and the well-bred tend always to attract each other towards marriage rather than the reverse. (2) Where caste, religious, economic, and racial groups mingle, custom, and even law, strongly favor keeping the higher types pure. (3) Where parental influence or

reason and forethoughtfulness play a large part in selection for marriage, usual tendency is to favor "better" heredity.

To these should be added in primitive life wife capture, wife purchase, and polygamy, all of which probably had eugenic effects, possibly offset in defects of rearing.

- e. Among certain kinds of social groups dysgenic influences are obvious. (1) Some occupations involve a migratory life which largely prevents formation of families—conspicuously those of the sailor, mercenary soldier, trapper, casual labor and (under present conditions) some exceptionally expert labor.

"Down to Gehenna or up to the Throne,
He travels fastest who travels alone."

(2) Modern wars probably eliminate many potential fathers of families. (3) Feminine refinement, and also revolt against "economic dependence," probably now promote permanent celibacy of certain superior strains, usually those of "well-to-do" ancestry. (4) *Fin de siècle* weariness, aestheticism, religious mysticism, economic pessimism, seem often so to weaken the "will to live," or to increase the selfishness of the individuals of substantial groups, as to destroy effective interest in family life.

- f. Certain social valuations are growing in our day whose ultimate consequences on stock are not yet wholly calculated. (1) The very large, irresponsibly produced, "rabbit warren" family is in general disfavor. (2) Preventable celibacy among men is socially disapproved. (3) Illegitimate motherhood and fatherhood are increasingly condemned, but the social condemnation on "illegitimate" childhood is being mitigated. (4) Continence and other means of "birth control" are increasingly approved among families aspiring to better standards of life.
- g. Much consideration, some of it scientific, is now being given to social eugenics—that is, to the purposeful control by law or effective public opinion of marriage so as to "improve" the stock. (1) Negative eugenics looks to prevention of marriage (and of course, *pro tanto*, of illegitimate procreation of those likely to transmit inheritable defects, blindness, deafness, imbecility, alcoholism, effects of venereal disease, etc. (2) Positive eugenics favors the marriage, and especially reasonably large families, of the racially "fit," partly by removal of artificial difficulties, and partly by public assistance—premiums for large families (France), part release from income taxes, maternity insurance, etc.
- h. But no comprehensive programs for artificial improvement of human stocks yet appear, due partly to ignorance as to what qualities, or combination of qualities, should be sought as ends;

and partly because effective means of control savor of undemocratic invasion of individual liberty.

3. International problems are rendered complex largely by biological factors. The following especially require consideration.

- a. Where stocks or races have long been isolated from each other, physical traits and social inheritances are so different as to make "assimilation" difficult, if not impracticable. If, then, migration takes place by one into area occupied by another with higher standard of life, the former tends, ultimately, to supercede the latter in the occupations with largest numbers.
- b. It is believed by geographers that long residence in the tropics tends, through heredity, and through customs affecting individuals, to disqualify men for the kinds of work, coöperation, aggression, and invention that give the largest and most effective groupings in the more favored regions of the temperate zones. Historically this has led to persistent subjugation and exploitation of the climatically less favored peoples. But where protection is extended to these tropical dwellers, they seem to multiply (India, South Africa, Mexico), and to aggravate low standards of living. If a period of tutelage will elevate them, then a possible course of democratic international policy is open. But are they below their rulers in some essentials of "stock"? Then, perhaps only permanent super-control would suffice. Would purposive eugenic control to the extent of restricting marriage to the economically promising tend to mitigate harmful inequalities?

REFERENCES: 1:51-82; 271-83; 425-57; 2:149-311; 21:29-42; 209-301; 596-611; 22:208-54; 23:404-25; 25:1-49; 27:263-86.

Conklin, Davenport (1), Deniker, Devine, Drysdale, Dugdale, Ellis, Ferris, Fiske, Goodsell, Huntington (2), Johnston, Reid, Saleeby, Starr, Thomas, Winship.

J. DEMOCRACY

1. Nature produces many great inequalities among individuals composing human society; and these are often intensified, given social approval, and perpetuated by social art.

- a. The young usually possess physical, mental and social powers inferior to the mature. Normally, therefore, the young are subordinate, and in need of protection from possible abuse, exploitation, suppression. The very aged, also, become inferior to the middle-aged in physical, mental, and other powers, and often require social protection.
- b. Women are natively inferior to men of same ages, during mature years, in physical strength, mobility, and in the mental qualities associated with aggression against animals and hostile men. Women probably surpass men in social qualities of sympathy,

aesthetic response, and ready subordination to minute routine work. Cultures intimately rooted in conditions of war and hunting give aggressive men endless opportunities to subjugate, oppress, overwork, and repress women, which disabilities are only slowly removed, as cultures shake off war influences.

- c. Only some portions of the earth's surface possess optimum material environment for means of development. Climates can be too cold or too warm, too dry or too humid, too variable or too uniform to give maximum development of the individual, even apart from conditions of dietetic nurture or shelter. The frigid zones, the lowlands of the torrid zone, the deserts and the regions of heavy persistent rainfall, the Siberias where barometric variability is slight—these seem to develop man poorly as contrasted with those sections of the temperate zone where cold and heat, not extreme, rapidly alternate, and where dry days and humid days also rapidly succeed each other. In lesser degree, topographical conditions seem to affect development—it has long been believed that, under primitive conditions, mountain, seashore, and desert folk are more rugged, enduring, and mobile than plainsmen. (But these need further examination of occupational concomitants.) Of most importance to the modern development (of large numbers and of differentiated occupations) is fact that natural resources for food and tools are distributed variably. Only four regions seem to possess the combined stores of coal and iron necessary for modern war or industrial development. Only limited areas can now produce on the gigantic scales required wheat, meat, cotton, rubber, oil, copper, rice, sisal hemp.

Historically, peoples of favored regions have been able, by virtue of superior powers of individual, superior numbers, or superior organization, to dominate (with resulting extermination, enslavement, and oppression—economic, political, religious, cultural) peoples of adverse environment. Some of the profounder problems of democracy to-day involve correction of these oppressions.

- d. Probably many generations of natural and eugenic selection under differing environment produce finally inherent or racial superiorities and inferiorities which no cultural agencies can offset. It is certain that Chinese and Japanese are of less stature than Western Europeans and that the skull size of certain tropical groups is small. Do Ainus, Dravidians, Maoris, Diggers, Bushmen, represent inferior stocks contrasted with Manchus, Sikhs, Sioux, Kaffirs? Do Goth, Teuton, and Norman represent a Nordic race superior in most essentials to Negro or American Indian? Here lie practical problems for future-world statesmanship.

- e. Within every family persons of the same apparent heredity are born with widely varying qualities—brothers differ as respects physical size, looks, mental abilities, aesthetic appreciations, social plasticities, dominance of sensual instincts, etc. Similarly, within communities of substantially similarly stocks, individuals appear with all grades of native superiority and inferiority. (Certify army and other "intelligence tests.")
- f. Within any given community group, superior heredity often tends to repeat in the same family group, and especially when favored by selective mating, thus giving local (as against conquering) aristocracies. The aggrandizing tendencies of these lead to need of social restraints in the interest of the weaker.
- g. Similarly, even apart from advantages of native heredity, variations in factors of social heredity—stored wealth, possession of strategic vocations, superior education—tend to accumulate and be transmitted in certain family, caste, or other local groups, here again eventually necessitating collective interference.
- h. Especially does such collective correction become necessary when variations in respect to native or social inheritance tend to crystallize in institutional forms—hereditary rulers, priesthoods, crafts, land-owners, traders; or, in effect, monopolies of certain kinds of learning, culture, sumptuary right, economic direction, etc.

2. In the interests of certain kinds of "larger group" efficiency and social continuity it becomes necessary to shape, curb, train, organize, govern, and "work" individuals or subordinated groups of individuals. These processes are considered under social control.

But, to the same ends, it becomes necessary to assist, liberate, upbuild, encourage, and exalt individuals or subordinated groups of individuals. We shall here use the term "democracy" as inclusive of all these tendencies and ends. We can assume that "the greatest good of the greatest number" is the final justification of democracy and determines its desirable limits, subject to possible corrections: (a) from certain Christian tenets that each human soul is infinitely precious and that earthly inequalities are wholly negligible as against heaven-destined perfection; and (b) certain philosophic tenets that the "individual" is primarily an "end" in himself rather than a "means" to society or to many others.

3. Possibilities of repression of individuals due to native inferiorities are primitively offset by:

- a. Natural sympathies of parents and other elders for youngers, leading to protection, education, encouragement of individual development.
- b. Filial and community sympathies with aged, and otherwise incapacitated.

- c. Women's abilities to win affection, to enlist chivalry, and sometimes to inspire fear, of men, especially in domestic and vocational fields in which man does not habitually operate.
- d. Subdivision of labor often evolves "protected harbor" occupations into which individuals of inferior gifts fit quite comfortably.
- e. Similarly, bands, companies, gangs, form through conjoining of leadership of the strong with followship of the weak and thus insure to latter maximum of possible opportunity for self-realization.
- f. The inferior develop defensive unions in which numbers and organization produce offensive powers sufficient to insure some independence.
- g. The weak retreat to environments where competition with the strong is less pressing.

4. But, in advanced stages of social evolution, possibilities of exploitation of weak individuals, weak groups, or weak stocks become great; while needs of "large group" social efficiency, as well as altruistic pursuit of "ideals of justice" progressively increase demands for removal of man imposed repressions of the weak, as well as reasonable mitigation of nature-imposed inferiorities. To these ends are addressed: (a) concerted effort of self-protecting organizations of the oppressed; (b) efforts of philanthropic bodies (including religious and voluntary political) on behalf of others than themselves (and perhaps using education, political action, and force); and eventually, (c) the efforts of the state itself, led thereto by its persuaded rulers or ruling majority. A thousand hard won achievements, contemporary "movements," and slowly crystalizing social ideals of this character may all be generalized as "modern" democracy. Some examples are:

- a. Parental interests and unorganized social sympathies with childhood, have not sufficed to insure the "fair start in life" which democratic idealism aspires to. The orphan, the child born out of wedlock, the child prematurely forced to work away from home, and the child deprived of opportunities for education or religious communion—these have first claimed concerted effort, which now manifests itself in scores of specific demands and collective movements. Present problems include: legitimation of the "illegitimate"; proper rearing of orphans; proper limits to "child labor" legislation; state protection of motherhood; vocational guidance and training; health supervision; supervision of parenthood; etc.
- b. The "disabilities of women" incorporated into law, religious custom, and subdivision of economic labor have been in process of gradual removal for centuries, but the end is not yet. Current movements for franchise; for vocational "equality";

for equal control, within the family group, of property, offspring, place of habitation, and rights of worship; and for other forms of "independence," are of poignant interest, partly because in some cases essential social foundations may be in process of being undermined faster than new supports are building.

- c. Vested inequalities of various kinds have been measurably corrected by modern movements for *political democracy*, originating in revolts of "guild" cities, "protesting" religious denominations, colonies, and unenfranchised majorities. Achievements can be traced in: impairment of hereditary nobilities; spread of constitutional government; government through elected representatives; extension of suffrage; equalization of taxation; protection of freedom of speech and press; development of public education; and numberless modifications of these in abolition of slavery, freedom of migration, secrecy of voting, etc.

Problems appear as to: alien citizenship; procuring governmental "efficiency" under the "many bosses" of democratic control; dangers of "mass" control by those of inferior political experience, knowledge, or, possibly, potential abilities—negro caste, soviet of manual laborers, warrens of city, a special religious group; how to "educate" individuals for social efficiency.

Aspirations for more political democracy within modern nation are now chiefly confined to unenfranchised adults, repressed racial group (negroes, "submerged nationalities"), repressed geographic groups (cities wanting home rule, Rhode Island's opposition to Constitution), and victims of political machinery, "bosses" or bureaucracies.

- d. Under "social democracy" we can include aspirations, programs, and achievements for correction or mitigation of disabilities, due to nature or social art, on consumption, intermarriage, sociability, culture, migration, worship, etc.

Formerly, as outcomes of totemic, religious, caste, and other restrictions of social control, many restraints were imposed upon consumption, and especially on decoration. Some food taboos are yet imposed by churches, and dress of sexes is still forcibly differentiated. But where political democracy prevails other sumptuary restraints on the individual have dwindled to conventional forms (coats for men, decorative uniforms in army, etc.).

Intermarriage of white and black castes is now legally prohibited in many states. Strong conventionalities restrain freedom of marriage between individuals of unlike economic, ancestral or religious connections. But freedom of divorce operates to give relative independence to women, with balance of harm probably for children.

In family, and in club sociability, a maximum of democracy tends to prevail within groups "elected" to be homogeneous; accompanied by markedly exclusive, "undemocratic" attitudes towards the "non-elect." Note examples in cliques, gangs, "sets," social clubs, fraternities, "secret societies," grades of hotels, Pullman cars, residence districts, occupational levels, cultural levels. But commercialization of amusements (photodrama, restaurant, dance hall, excursion, resorts, etc.) and transportation (street cars, local trains and local ships having no "classes") as well as public provision of social facilities—streets, parks, public lectures, public libraries, museums,—all weaken or remove barriers to "democratic" association.

But free association or sociability is now governed largely by sumptuary and other caste-like cleavages. "Sets" or "classes" restrict to those able to dress, entertain, recreate, and educate on similar planes. Manners, conventions, mutual interests, thus become stratified in society, each plane relatively insulated from those above and below. Of only somewhat less vitality in preventing 'sociability' democracy are racial, religious, and occupational distinctions.

Formerly "culture classes" held apart, especially the "erudite" and the unlettered. Latin and Greek were once prized because they denoted "gentle rearing." Now these distinctions tend to disappear as moderate education becomes general, but similar distinctions attach to "club" groupings for sociability purposes.

Formerly collective action greatly impeded freedom of migration and residence. Surviving restrictions rest largely on grounds of political expediency, and are directed chiefly against immigration, property holding and trade (cf. immigration of Hindoos to Canada, Australia, South Africa; of Chinese, Japanese, polygamists and avowed anarchists to the United States; of low class English labor to Canada, etc.).

Formerly, religions were variously exclusive. Some held no salvation for women, low castes, peoples not chosen by God. But the world faiths have been strongly propagandistic, inclusive, and even destructive of undemocratic barriers resting on other grounds (primitive Christianity, Quakerism, Unitarianism, Roman Catholicism). Caste (blacks *vs.* whites) affects some churches in America; while economic differences are alleged to debar the "poor" from others.

Except in case of color barriers to free intermarriage, existing limitations on "social democracy" seem to inhere more fundamentally in economic differentiations (productive powers, possessions, consuming powers, standards of living) than in race, religion, or ancestral family, since economic equalization, after a period for adjustment, seems to remove barriers more

certainly than other changes. Probably this affects contemporary interest in "industrial democracy."

- e. Under the term "industrial democracy" should be considered many of the most vital aspirations of the present age. These are probably inevitable effects of recent rapid economic developments, transformations of productive processes, multiplications of populations, rising standards of living, curtailment of natural resources, etc.

Native inequalities of productive ability—due to age, sex, physical strength and dexterity, endurance, mental powers, self-control, avid appetites, combine everywhere with socially produced inequalities—birth in poor regions and of poor parents or in poor times, acquired ill-health, deprivation of suitable education, accidental entrance upon a badly developed or declining economic "lead," to give numberless and very wide economic inequalities between regional classes, classes derived from different economic levels, and classes affected by different stages or types of economic evolution; and still wider inequalities among individuals. Political democracy, general education, and freedom of migration tend to mitigate these inequalities, but probably not to the same extent that these influences generally raise standards of living, which are always the torturing provocatives of economic demand.

Communism (of ownership and for consumption) becomes one end of economic democracy (an end realized in the family, the pioneering company or industrial crew, and many primitive religious communities, but with no enduring examples among complex, advanced peoples). Co-partnership, profit-and-loss sharing, guild control, state operation (with no "profits"), and coöperative exchange, are current experiments towards other kinds of economic democracy.

5. Efforts to realize ideals of democracy as factors in social efficiency give rise to many problems of conflicting social forces. Where life is primitive, scattered, unorganized, there are few problems of democracy since (a) man collectively has little means of removing nature-imposed disabilities on the individual, and (b) collectively he has had reason to impose only a few of his own that are not essential to small group survival.

But as men multiply, organize and expand the social inheritance, their powers of helping various kinds and classes of individuals to fuller lives, in spite of natural limitations, increase; and the possibilities of more carefully adjusting the yokes of social control, economic control, and of increasing justice so as to preserve the social effectiveness of the individual and at the same time give him the maximum of individual freedom always exist. For Great Britain, France and America, the most pressing current problems seem to be those of democratizing all those social agencies

in which elaborateness of mechanism oppresses, or seems to oppress, the individual or sub-group.

Everywhere the radicals strive for more democracy of some variety (sometimes organizing their strivings in very undemocratic ways) and in propaganda they ignore or depreciate social achievements under methods they would correct or supplant. Everywhere the conservatives strive against hasty or far-reaching action, fearing to lose in revolution, present gains—fearing especially, of course, on behalf of themselves and those nearest them. The mills of the gods meantime grind on and nature ultimately gives the final verdict. Note some of the problems:

- a. Political democracy, having achieved general suffrage and removed disability to office holding, finds endless difficulties in the complexities of the problems it faces. Officials *will* not act as majority superficially think they should, hence correctives sought in recall, initiative and referendum, soviet (economic class) representation, simplification of constitutional amendment, the short ballot, etc. Hence popular opposition to appointment of officials to indefinite tenure, and other conditions provocative of bureaucracy.
- b. Freedom of access of women to all wage earning employments has been won, but ultimate effects of this on normal family life constitute problems.
- c. Production organized on corporation basis creates extensive regimentation of workers. Initiative lies chiefly with those factors who own, or can command capital wherewith to procure means of production—land, mines, patents, machines, raw materials, franchises, technical knowledge. In corporation production—best exemplified in railroads, factories, banks, steamships, mines, some tropical farming—areas of individual initiative are lessened (possibly with local intensification, however) as is military initiative for the soldier in the large army. Hence eventually collective dissatisfaction unionization for self-protection, and emergence of vague but insistent demands for “industrial democracy.” Can a large army be democratic and efficient? Can the crew effectively dictate or share in determining the course of a steamer? To what extent can workers determine policies of a large factory? Who shall take the initiative in development, e. g., in planning new railways or opening new mines? (Note discussion later of distinctions between powers to *discover* courses of action, and capacities to *discriminate* among courses devised by specialists, as basis for domestic control.)

REFERENCES: 1:157-91; 399-414; 541-52; 3:101-47; 4:159-75; 21:431-49; 632-52; 22:394-400; 23:678-97; 25:428-43; 27:451-86; 26:94-118.

Addams (1), Antin, Bogart, Carlton, Cooley (2), Coolidge, Dean, Dewey, Eliot, George, Ghent, Hadley, Hill, Hollister, Jenks, Lee (1), Mecklin, Putnam, Riis, Roosevelt, Ross (4), Ward (1).

CHAPTER IV

SOCIAL STANDARDS DETERMINING EDUCATIONAL OBJECTIVES

1. Societies are made up of individuals, each of whom must be prepared to "fit in," to "play his part." In a purely practical sense there can be no society apart from individuals composing it.

a. Tools, buildings, ideas, languages, laws, institutions become vital only as used by individuals. The social inheritance, though in part transmitted in concrete and objective form, is at last made available for each new generation only by and through individuals. One function of social economy is to help establish good (socially approved) conditions for individuals; but another equally important is to help shape individuals in whom and through whom the social inheritance can profitably be invested and increased.

b. It is not intended here to raise the historic issue, society *vs.* the individual. For practical purposes it is clear that in any social group it is possible for the individual (at least temporarily, and also on the basis of felt or assumed values,—perhaps only apparent values) to foster his own interests at the expense of the group (cf. self-centered member of family, grasping partner, corrupt citizen, cowardly soldier, monopolist, idler); while it is no less possible for a social group in pursuit of its real or imagined aims (imagined by its more influential members often) excessively to cramp, suppress, or overwork the individual (cf. Ancestor worship, political restraint of thought and action, excessive or hurtful service exacted by economic organizations, "judicial cruelty," slavery, suppression of women, military domination, parasitism of certain professions). Practically, it is clear that existence for civilized man is possible only in and through societies to which he has been shaped, and equally, that social life is practicable only by virtue of the presence of sufficient personalities suitably shaped for it. Note Kant's insistence that man, however lowly, must be regarded as a means, but always as an end. Christianity involves the same ideal. Democracy involves as its central ideal, the worth of the individual, "man as an end."

2. Educational objectives then, must be products of at least two variable factors: (a) what kinds and amounts of education are, in the case of given individuals (or, practically, groups or classes considered as to native abilities, sex, probable opportunities), to be regarded as of

"optimum" possibilities for *individual* well-being—growth, self-realization, satisfaction of instincts for creation, freedom, expression, etc.; (b) What kinds and amounts of education are, in the case of individuals, classified as to native powers, probable opportunities, etc., to be regarded as of optimum possibilities from the standpoint of permanent "group" well-being—the nation, the family, the church, the "stock," "Americanism," democratic peoples, etc.

- a. No complete separation of these two classes of objectives is practicable: but only the believer in Utopias will hold that they are not more or less in conflict—the same who believes the interests of labor and capital are "identical." Practically, it is a matter of relative stressing—now objectives of individual realization, now "small group" ends, now those of the comprehensive church, the nation, or even "humanity." (Read Chap. 3 of H. G. Wells's *The New Machiavelli*.)
- b. The limits of practicable education are, of course, always found at some point of "diminishing returns," first in the educability of the given individual and second in the available social resources to support such education. It is certain that individuals by virtue of native inheritance, vary greatly in their capacities to learn to run, climb, follow game, solve mathematical problems, lead others, appreciate music, speak other languages, be guided by moral ideals, resist specific temptations and acquire specific vocational skills. Furthermore societies of given times and places vary greatly in possession of resources (not merely salaries for teachers, buildings, and equipment, but also available teaching personnel, tested methods of instruction and training) whereby education can be carried on. Most forms of by-education are relatively inexpensive, and sometimes very effective; most forms of direct education are expensive, and sometimes very ineffective. (See Chap. 13 in L. F. Ward's *Applied Sociology* for elaboration of this that if proper methods of instruction were once worked out people of even low ability could assimilate "difficult" knowledge,—e.g., mathematics, political science. In other words, that there are such things as "royal roads to learning" and it is as much an obligation of society collectively to grade and pave such roads for all people as it is to grade and pave roadways for material commerce.)

3. Except under conditions of extraordinary social change (in some particular function—e.g., economic, civic, migration, invention, war) it is reasonably safe to assume that the first *standards* or *social criteria* for practical social efficiency and therefore for educational objectives can be found in selected groups or grades of adult individuals now composing society. In any event, provisional standards, subject to subsequent specific modification, can thus be derived.

- a. As a convenient means of deriving such a group, let us grade adults 25-35 years of age into four classes, on the basis of their possession of one or more measurable (or at least rankable) qualities. If no criteria of objective character are used already in social science, we can arbitrarily place the twenty per cent of our cases having quality in the highest or most approved form in the A class, the next 30 per cent in the B class, the next 30 per cent in the C class, and the lowest 20 per cent in the D class. (If we were using criteria already established, we should often be obliged to employ different proportions; e.g., if men 30-40 were divided into grades A, rich; B, fairly prosperous; C, poor (but self-supporting); and D (dependent), ratios would hardly fall as above.)

Individuals composing society could for practical purposes be graded as above as respects: health; industriousness; thrift; observance of laws; temperance; interest or success in family-building; political intelligence; moral character; practical activity in community politics; sociability; religious life; interest in art; interest in (specified type of) literature; attitude towards jury duty; etc. (In every case, of course, accurate definitions or at least description—with illustrative examples—is presupposed.)

Again, individuals could be graded on the basis of algebraic sums of certain qualities: e.g., a man ranked A in thrift, D in moral character, B in devotion to family, and C as a voter might be given a composite grade of B or C according to the weight and importance attached to these various qualities.

4. For many practical purposes, analysis of the qualities of the "B grade" man of 25-35 (or other age period) will give the most satisfactory points of departure in defining objectives in education. (Of course, once having defined the qualities of B grade men to-day we may determine that the B grade man of the next decade or two shall in specific respects and degrees be better; here we would consciously provide for progress.)

- a. In planning for the vocational education of prospective carpenters we would take and grade (on basis of weekly wage,—better, yearly income) all carpenters. We would then ascertain *common* qualities of the B grade carpenters. Then classify these qualities according as they are producible by direct education or controlled by-education, after which detailed program of industrial education in carpentry could be elaborated.
- b. To obtain basis for constructive program of homemaking education, let us take 100 homemakers, ages 30 to 40, of normal type, e.g., having no servant help, having three to five children, living in detached houses—much the most common type of homemaker in America. Thirty of our hundred we rank as of

B grade. These now keep fairly good homes. What powers, qualities, technical knowledges, skills do they now possess? How did they reach this point? Could their present attainments have been achieved (under a better system of education) more expeditiously, more economically, more surely?

- c. Similarly could we ascertain in some degree what secondary school science and mathematics should be taught to prospective engineers by analysis of needs of B grade engineers now? Could we in the same manner derive standards of practical (if not cultural) objectives for teaching of modern languages?
- d. In providing programs of civic education for specified social groups where conditions from generation to generation are fairly static we could analyze in detail civic virtues and vices now common to adults 30 to 50 (for example, small farmers in upper Mississippi Valley states). Presumably the "B grade" among these (by civic standards) show a large preponderance of civic virtues (in terms of degree, usually, rather than of kind) over vices. Hence first purposive aim of school might be to increase number who in next generation would be of this quality; next, to add some specific new degree or kind of civic virtue to all.

5. Determination of *social policies* whence specific educational objectives must be derived is not usually the responsibility of educators—something they often forget. Partly as slow social precipitates, partly as inventions (or at least formulations) of leaders, social policies (towards realizing new or more ample measures of such "values" as security, wealth, freedom, health, righteousness, stock, knowledge, beauty, sociability, etc.) come to educators as social demands for specific educational procedures.

- a. The history of education abounds in examples. Note how modern demands for better health, better vocational competency, a more "protected" childhood, readiness for (military) defence, and the like produce constantly new educational demands.

CHAPTER V

SPECIFIC OBJECTIVES OF EDUCATION

The possible specific objectives of education are almost numberless. For practical purposes it is important that these be grouped into classes, general divisions, or other workable groupings, to the end that in each group will be found common elements of purpose or of method.

- a. A concrete or specific objective determines a detailed course of procedure adapted only to the achievement of that objective. Naturally, these objectives will differ greatly in magnitude (as measured in terms of time, energy, or attention required for their mastery). For example: to acquire a speaking knowledge of Spanish, a working knowledge of trigonometry, or a specified degree of mastery of carpentry, or stenography, could be described as large objectives; but within these, detailed objectives—mastery of certain verb irregularities in Spanish, use of logarithms in trigonometry, skill in use of slide rule, or special spelling for stenographers.

In educational practice, the most specific objectives for practical purposes are indicated by the *teaching units* employed—the *question and answer* of the catechetical method, the *lesson*, the *topic*, the *project*, the *exercise*, etc. Each one of these is assumed to give a stone to the total structure of knowledge, skill or other habituation, ideal complex, or appreciation complex, which it is designed to build. (When once the value and general character of large objectives have been determined, it becomes the urgent business of educators to define detailed objectives; otherwise serious loss of effort becomes inevitable.)

1. Earliest groupings of conscious objectives of by-education and direct education were naturally along sex lines. (a) In clan and tribal life, after the "infant" period spent by all children with women, boys were isolated and prepared for initiation—usually taking place about 16. For each sex, education (largely on the basis of imitation) was, during adolescence, directed towards well-established traditional ends. (Goodsell, Tarde, Dewey and Tufts, Sutherland.)

2. The city-state, the kingdom, and the empire along with many other social features of post-barbaric society seems to have rested on conquest of one population by another.

- a. Hence appear forms of education adapted to various social classes or castes: for warrior caste (Sparta, Athens, Persia, Samurai, knighthood); for "leisure" class (often a courtship,

civic or property holding class derived from the warrior caste—cf. Athens, aristocracy of period of Louis XIV, modern English aristocracy); for governing class (cf. Rome, education of princes at all stages, English public schools); for various occupational classes—priesthoods, trade guilds, entertainers, scholars (cf. almost any period in history). (Here appear beginnings of socially purposive vocational education.) (Add examples from history of education.)

3. With development of attempts at universal education, classification of objectives on basis of age, maturity, or intellectual development of learners, appears.

a. Examples, infant schools, kindergartens, day nurseries, dames' schools, primary schools, elementary schools, graded grammar schools, academies, colleges, universities. (Add examples.)

4. Similarly specific objectives, singly or grouped, give types of schools: Bible classes, spelling schools, singing schools, dancing classes, schools for deportment, finishing schools, (Latin) grammar schools, fitting schools (for college), correspondence schools (for specified subjects), language schools, vocational schools, etc. (cf. endless examples in any large commercial city).

5. Early reflections about educational psychology produced numerous attempts to classify educational objectives according to particular "general powers" of mind and spirit to be educated, e.g., physical education, education of will, spiritual (or religious) education.

a. Some of these categories, e.g., physical education and moral education, are still extensively used. But: "education of the will" is now used only in the literature of educational mysticism; no satisfactory boundaries have been set respectively to (or relationships indicated between) moral education, ethical education, spiritual education (or education of the spiritual nature) and religious education. For practical purposes, these are also largely "mystical" generalizations. (Analyze practical objections to: "intellectual education," "education of the emotions," and even to "moral education," as descriptive heads.)

6. With modern recognition of the value of play have arisen vague categories of "education through play" and (presumably) education through work.

a. This differentiation is capable of extension: education through pupil's self-direction (in propitious environment) of his natural or spontaneous learning instincts and impulses; and education through external (social) direction of his activities towards predetermined ends. ("Natural" *vs.* artificial, informal *vs.* formal, spontaneous *vs.* direct, etc.) (Corresponds in part to alpha-beta classification below.) (Ill. from Boy Scout and other "club" education.)

7. With modern recognition of educative significance of agencies other than school comes vague classification of objectives on the basis of agencies offering direct or by-education.

- a. Most conspicuous of these are: home; school; church; shop (generic for all forms of participation in productive activity including farm, office, shipboard, house); playground (including street association); club; press; stage (including moving picture); library; museum; police.
- b. Note that of the foregoing: school, library, museum and police only are (in America) under public direction or complete control; stage and press are necessarily commercialized; home, church, shop, clubs and the usual playground have other than educative as primary functions, hence their (secondary, incidental) educative functions must be variable, accidental, badly directed (in fact education is a by-product).

8. The most serviceable classification, for the present, is based, first upon grouping of all results of education and by-education (superimposed upon the products of heredity and material environment) as seen in qualities and powers of individuals, under four main heads: (a) physical (those primarily associated with health, strength, longevity, endurance, etc.); (b) vocational (those associated with capacity for productive work, service, including the minors of health, social ideal, personal culture that are specifically significant in particular vocations); (c) social (those associated primarily with successful group living, including moral habits, moral conformity, civic initiative, possession and use of ethical ideals and standards, etc.); and (d) cultural (including stimulation and development of intellectual and aesthetic interests,—in music, literature, science, plastic art, dancing, travel, history, general knowledge, sociability,—establishment of hobbies or avocational interests, refinements of social behavior beyond the point required for group participation, etc.).

- a. Define: "cultural education"; "liberal education"; erudition; scholarship; "the well-informed man."
- b. What is "the education of a gentleman"? What is education "for living"? for "leisure"?
- c. The above groups overlap, but it is contended each has a focal area, overlapping exists only at margins.

9. In second place, a cross-sectional division of all of these products (under 8 above) into two divisions, according as they are or should be: (a) the results of "natural" (i.e., spontaneous, untrammelled developmental, appreciative learning); or (b) the results of systematically directed learning towards foreseen goals in adult participation in civilized life. These classes are named hereafter respectively beta and alpha objectives.

- a. Make two classes of objectives of an ordinary life's activities on lines here suggested.

- b. Examples of beta objectives: all the varied products of play; of reading for general interest; of travel, exploration, social commingling; of group life for play purposes (gangs, cliques, fraternities); of Boy Scout activities; of volunteer activities in response to ideals of teachers; the learning of the vernacular and numberless other arts under stimulus of social environment (by-education) or the school.
- c. Examples of alpha objectives: the formal subjects of the schools,—usually; the recognized vocations,—usually; many cultural lines when pursued for distinct motives of achievement (art, music, literature, history, dancing) or distinction.

10. Tabular form for classification of objectives, then, would be as follows:

**FORMS OF DEVELOPMENT
AND EDUCATION**

ALPHA OBJECTIVES

BETA OBJECTIVES

I. Physical	a. Corrective training b. Organized knowledge of special fields of hygiene c. etc.	a. Play—varied forms b. Readings in sanitation and hygiene c. etc.
II. Vocational	a. Practice in occupation b. Study of related technical knowledge, occupation	a. Readings, excursions, etc., in vocational sociology of occupation
III. Social	a. Approved school behavior b. Organized knowledge, state government c. Essential facts of American history	a. School self-government b. Boy Scout work c. Readings, etc., in social science d. etc.
IV. Cultural	a. Elem. school arts b. Foreign language c. Execution of music d. etc.	a. General reading b. General science c. Musical appreciation d. etc.

11. Other classification of objectives based as above on results to be realized in the individual, in part for himself and in part for society, follows somewhat different lines. The following are proposals:

- a. It is proposed not to give a separate head to physical education—requiring that health, physical well-being, shall be inclusive of all others and as a basal condition to them. Similar proposals are to make (a) cultural, and (b) social (moral, civic) relatively more inclusive.
 - (1) But for practical purposes at least, discrimination is indispensable—and at least some of the objectives under each head are of equivalent importance.
- b. Several provide a special head for “family education”—all that is designed to promote man’s efficiency in organizing and maintaining the family.
 - (1) This is a vague and unduly inclusive objective.

c. One would provide special subdivision for the ethical.

(1) But this fails to recognize that the final essence of the "ethical" is found in "behavior," "conduct."

12. The above grouping does not provide in a very satisfactory way for placing of those studies that are fundamentally "instrumental"—to purely cultural as well as to vocational studies, e.g., reading, writing, spelling, mathematics, foreign language.

13. The classification gives no special place to studies designed chiefly for mental training, e.g., mathematics, Latin, mental arithmetic, science (for scientific method). Assumed that best doctrine favors provision for mental training as a by-product of all forms of learning, and that no studies have an exceptional or unique value for "mental training," "mind discipline," etc.

CHAPTER VI

THE EVOLUTION OF EDUCATION

1. It is sociologically justifiable to speak of the "evolution" of a social institution or mechanism, e.g., government, nationality, marriage, agriculture, philosophy, the Methodist Church, slavery. Origins of the institution are to be found in human needs. Primitive beginnings are invented or "grow" from "accidental variations." Competition is encountered, weak forms are destroyed, well supported forms thrive, and protective mechanisms are developed. The institution becomes part of the "social inheritance," being transmitted as generations of individuals come and go. In general it may be assumed:

- a. That any institution that becomes well established and deeply rooted, serves valuable ends for the group cherishing it during its earlier and vital period (although group may represent only a section, caste, or class of the total genetic society of the area affected); but that
- b. Often an institution acquires momentum (especially in eras of custom control as against scientific control) which causes it to survive long after its usefulness has diminished or ended, thus necessitating destructive conflict against it. (Illustrate from slavery, "divine right" of kings, polygamy, primogeniture, trial by ordeal, corporal punishment in schools, Gothic architecture, Chinese cues, "cupping and bleeding," dogma, caste, Whig party, "paganism," transportation by sailing vessels, quill pens, mental arithmetic, Greek, ornate handwriting. What are problematical elements in future of: capital punishment, the "wage system," mental training through "simples," appointment of judges, display advertising, burial of dead, "nationalism," full economic responsibilities of widows, metaphysics?)

2. The survival, and no less the advancement, of any considerable genetic group (advancement in numbers, powers, prestige, economy) is of course conditioned by the degree of its attainment of certain fundamental social values such as security, conquest of the means of livelihood, perpetuation of stocks, "large group" cohesiveness, etc. The conscious or unconscious pursuit of these ends gives rise to arts, customs, conquest, worship, institutions to insure justice, property, acculturation, and the rest as means to the ends of survival and "life more abundantly." The circumstances, as well as certain obscure internal or subjective resultants of preceding evolution, of any given people may cause preponderant importance to be attached for a period to one or a few of these means.

- a. Biologists assert that among animal forms, evolution along one line—horns of the Irish elk, tusks of mastodon, size of whale—may proceed to lengths of becoming destructive of the species. Probably social analogies exist where excessive pursuit of conquest, worship, wealth, beauty or progeny becomes destructive.

3. It is natural that a people or a group, a class or party of a people, should incorporate into the purposes of its education and its by-education, the pursuit of those ends it then deems valuable. Some noteworthy examples are:

- a. The use by primitive groups much given to fighting, of "ordeal initiations."
- b. The use of prolonged religious training by religious guilds.
- c. The use of military education by conquerors subsisting as rulers, land owners, specialized defenders, and decorative or leisure castes.
- d. Systematic vocational education by economic guilds.
- e. Systematic acculturation where a virile people fall heir to, or can import, the culture of a more advanced people. (Rome from Greece, Japan from Occident, modern European nations from Rome, Constantinople from Athens, United States from Europe.)
- f. Systematic education in literacy for Protestant worship.
- g. Systematic education towards literacy and other ends for citizenship under general suffrage.
- h. Systematic education of the disinherited (orphans, offenders, subnormals, occupationless).
- i. The conservation, advancement and transmission of culture by "cultured" group—literati, *intelligenza*, gentlemen, scholars, naturalists, scientists, the "erudite," and, at times, by priest-hoods, teaching guilds, officialdom, aristocracies, professions—become often a self-imposed function of selected individuals.

4. Processes and stages in the evolution of educational aims, means, methods and administrative mechanisms are to be found in the "histories" of education. (See chapter bibliographies in Monroe, *Textbook in the History of Education*.) There needs yet to be written a sociological work describing and interpreting the *general* features of the evolution of education, as found, for example:

- a. When peoples in savage stages develop initiations, legends, penalties, taboos, mechanisms of suggestion, ceremonials and the like as means of limiting, stimulating, directing and crystallizing into habits, ideals, and valuations (appreciations) the instincts of youth or subordinate elders towards approved forms of conformity, skill, enterprise, culture. (Letourneau's *L'Evo-lution de l'Education* is suggestive here.)

- b. When castes or caste-like groups, created by conquest, racial intermingling, religious differentiation, vocational specialization, each develop elaborate educational mechanisms under competitive pressure to conserve and increase their peculiar social inheritance, and when, especially in pre-scientific stages of social evolution, these take hard shape in customs, rituals, faiths, dogmas, laws, "red tape," and creeds. (From this point of vantage should be interpreted very much of: Persian, Athenian, Spartan, and Roman education—physical and military, civic, artistic, cultural—that has record in history; the "guild" education of the Middle Ages—in the broad sense that chivalry, the church, the crafts, and traders each had their own types of guilds, which occasionally blended, as in the composite groups originating in the crusades; the modern survivals of "private," parochial, "military," and "finishing schools"; and probably some of the more monopolized and crystallized products of eras of rapid acculturation—e.g., the Renaissance.)
- c. When social evolution gives the state (or nation) such prominence and responsibilities as to necessitate *public control* (including, usually, support) of education and enforcement of universal minimum standards, during which caste and other group qualities yield to suffrage, universal literacy, spread of scientific thinking, democratic aspirations. (Herefrom interpret educational accompaniments of nationalistic democratic and economic evolution in 19th century United States, France, Germany, Great Britain, and Japan, together with struggles of contemporary Russia, China, Italy, Peru and the like.)
- d. When mechanisms of guild or state education tend by premature or excessive functioning to over-contract, over-modify, or over-work the native powers and "small group" potentialities of children, resulting in "reform" movements launched to protect the "rights" of children to "childhood." (Thus vogue is given to Port Royalists, Comenius, Rousseau, Pestalozzi, Herbart, Froebel, Dickens, Spencer, Parker, Hall, Dewey. Note reactions against over-developed and premature military, church, and apprenticeship training, indenture of orphans, early commitment to boarding school, imprisonment of juvenile offenders, dominance of "external" examinations, competitions, "payment by results," drudgery of the "formal subjects." There appear school play, "doctrine of interests," the kindergarten, scouting, hand work, etc.)
- e. When "new systems" of education reach sufficient development to produce far-reaching conflicts over aims, means, methods and administrative agencies. Here include conflicts about: humanism, Jesuitism, realism, classicism, science, vocational education.
- f. Finally when a nation seeks forcibly the acculturation of a sepa-

rate and subject people by direct or indirect methods (always aspired to, and often practiced, under imperialism) through substitution of language, education of leaders, control of standards of schooling, etc. (Rome in subject nations, Great Britain in India, United States in Philippines, Germany in Poland, etc.)

REFERENCES: See chapter bibliographies in Monroe's *History of Education*.

CHAPTER VII

PHYSICAL EDUCATION: SOCIOLOGICAL PRESUPPOSITIONS AND CONDITIONS

1. Physical well-being in the individual commonly connotes: development in size and functioning of bodily organs appropriate to age, sex, race, habitat, etc.; and possession of powers of conserving health and strength towards normal requirements of vocation, advancing years, family life and general happiness.

Heredity in man as in animal and plant life provides self-functioning mechanisms for fairly complete physical development (except occasional abnormalities), which is achieved if *nurture* is right and sufficient. (Include under nurture not only food, rest, shelter, and weather stimuli, but also play, companionship, incentives to varied instinctive functioning, etc.) Hence if man through long ages preserved same environment and had imposed upon him same necessities for work, etc., he should possess the same normal health as plants and animals in their wild state.

But man has, much more than other life, (a) shifted from one environment to another; and (b) imposed upon himself artificial conditions of numberless kinds. Hence in development and in conservation of health he has to seek special correctives or suffer consequences of mal-development and mal-adjustment. Problems of "good and evil" in matters of physical (no less than of moral) soundness result from inability of the hereditary mechanism to keep pace in evolution with the new requirements imposed upon it. The individual adaptiveness of the bodily mechanism to new conditions (of habitat, climate, food, work, etc.) is not yet clearly known, but is obviously greatly affected by age at which new conditions are imposed. (See Huntington, E., *Civilization and Climate*; and Crile, G. W., *Man—An Adaptive Mechanism*.) Nor is it known how rapidly evolutionary adaptation takes place through elimination of unfit types under new conditions (negroes in cold climates, Europeans in America, landsman at sea, etc.).

2. Under *physical education* therefore are to be included all those forms of control of environment, direction of activities, instruction, and training, whether half-conscious in customs of by-education or wholly purposive in direct education, the expected outcomes of which are chiefly, first, good physical development, health and working powers, and, second, the knowledge, ideals and habits for the future conservation of these. Specific objectives are now found in: supervision and control of nurture; provision of facilities for play; prevention of infection or other conditions of disease; instruction in hygiene; physical training, etc.

The fundamental problems of current physical education include: what are the deviations from the normal hereditary standards of physical development which civilized life entails; how far and in what respects can training or habituation provide compensation for these imposed deviations?

3. Examination of the conditions imposed by civilization shows that man has largely artificialized his habitat, as well as living and working conditions, especially along these lines:

- a. Primate ancestors of man were probably vegetarian. There followed a long period when he was omnivorous, with sections heavily dependent on fish and flesh diet. Hence, extensive development of teeth, jaws, alimentary canal. Then came the era of cooked foods, concentrated foods, partly predigested foods. Effects in under use of teeth, alimentary canal. Problem: to what extent should children repeat ancestral use of coarse foods?
- b. Hereditary mechanism of body in several respects still adapted to quadrupedal (or quadrumanal) life. Man's erect posture needed to free the hands, to hold infants, and, perhaps, to carry brain. Resulting complications in difficulties of child-bearing, liability to rupture, foot and spine troubles, etc. Possible that use of chairs for sitting adds to the difficulties. Problem of fixed postures for children.
- c. Ancestral man probably hairy, then hairless (possible effects of selections, sexual; vermin-born disease, etc.), then clothed. Clothing seems to "increase tax on lungs and kidneys." Problem of minimum clothing, open-air sleeping, etc., for children. "Natural" aspects of bathing, work to the point of perspiration, stimulation of body through varying temperatures (ventilation), effects of extreme variations in climate, of indoor working, etc.
- d. Primitive man had localized habitat, hence "picked up" relatively few pathogenic bacterial species. Selection in many cases doubtless brought immunity or lessened virulence, or species disappeared except in limited areas where it remained endemic. But exploration, conquest and commerce distribute widely bacterial species heretofore local and among peoples heretofore immune. (cf. Cholera, plague, measles and small-pox (among Indians), parasitic hookworm.) Man in temperate zones must fight scores and in tropics even more bacterial diseases. Possibilities of prevention: (1) by extirpating (or closely limiting) pathogenic species (possibilities in plague, yellow fever, cholera, malaria, typhus, typhoid, syphilis, tuberculosis); (2) by making body resistant through natural development (possibilities in tuberculosis, pneumonia, colds, measles); (3) by artificial immunization (small-pox, typhoid); (4) early use of antiseptic

or curative measures (hookworm, diphtheria, infant blindness, wound infection, etc.); and (5) prevention of communication by intelligent individual action (personal contacts, use of common vessels, laundry, food inspection, home antisepsis).

- (a) Systematic education towards successful combat of bacterial disease offers possibilities of large social returns (cf. Irving Fisher, Hutchinson.) Part of this instruction under physical education, part under social education (civic action in sanitation). Problem here very like earlier problems of extirpating wolves, poisonous serpents, rats, vermin,—knowledge, individual effort, social effort. Problem of "natural immunization" to chicken-pox, measles, whooping cough, etc.
- e. Primitive man probably evolved eye suited to most frequent use at fairly long ranges. Heavy strain put on hereditary mechanism by primitive handicrafts; and still greater by modern use of printing. Problems: mechanically aiding eyes of children; of increasing visibility of short range work; and of increasing, in early years, extent of easy long range use (Boy Scout activities, etc.).
- f. Civilized man uses artificial heat extensively. Effect of this in preventing full development of bodily capacity in children not known. Primitive man in temperate and colder zones doubtless developed bodily mechanism that thrived (within limits) on exposure to extremes and even suffering therefrom. (Problem of the physical moltycoddles, the softened girl or coop-woman.)
- g. Primitive man doubtless lived much in open air, with abundance of oxygen, breezes, little organic emanation in air. Character, extent and duration of cave-dwelling period not well known, but probably much adaptation to sleeping (but not working) in crowded, unventilated cells at this time produced. Civilization produces necessity of working in rooms (not required even of caveman). Recent hypotheses as to need of ventilation chiefly to provide for escape of heat and varied stimulus rather than to prevent breathing air with high content of CO₂ and organic matter. Problems of open air for sleeping and school work.
- h. Prolongation of infancy (Fiske) of man had effected postponement of maturity of mating impulse until about age sixteen; except that warmth, abundance of stimulating food and deficient physical activity may cause prematurity, also, even under normal conditions, the young experience foreshadowing of sex impulses, "hauntings," even possible neuroses (Freud). But conditions of civilized life tend to impose long postponement of approved mating (marriage)—in occidental countries,

for "working" classes, 20-24, for "middle" classes, 24-30. Hence period 15—to marriage is especially characterized by problems of conservation of health as affected by sex life (and continence), prevention of pathological manifestations (individual and social), and conservation of aesthetic and social ideals capable of being interwoven with finer manifestations and irradiations of sex instinct in love, appreciation of beauty, family ideals and religion. (Bigelow, Havelock, Ellis.)

- (1) Problems involved classify in part under hygiene (physical education) and in part under morality (especially moral ideals—social education.)
 - (2) While early mating (in socially approved, or in tabooed forms) has been common among primitive peoples, it is also certain that for long periods and for considerable classes of men continence even to advanced years has been assured through dominance of ideals of physical excellence for demands of war; also through prevalence of religious ideals. Note also very general social insistence on continence as pre-condition and concurrent condition for approved marriage, especially for women.
 - (3) Problems of sex education involve at least (a) knowledge towards prudential ends; (b) knowledge and ideals towards influential motives for continence and idealism; and (c) abundant physical activity, disregard of physical ease (or softness), and unstimulating foods, to counter development of sex impulses. Probably early development in the mind of youth of convictions as to harmful possibilities of broodings, day-dreams, etc., will prove helpful. On the other hand, unsound valuations of certain semi-normal manifestations to be guarded against. (Bigelow.)
 - (4) Assuming co-education to be so conducted as to preclude anti-social developments (thoughts, speech, coquetries), its probable values as a means of normalizing extra-marital relations of the sexes should be examined. Probabilities that potencies of co-education in this direction should be further developed.
 - (5) Development of social education designed correctly to evaluate family life, each individual's potential contribution to same, and elucidating conditions of soundness in, ought to make valuable contributions.
- i. Primitive man worked spasmodically, intensely at times, and with frequent and irregular intermissions. Perhaps women first developed routine work. Later slaves were held to long routine work; then, as condition of economic survival, almost all workers except soldiers and "leisure class." All routine

work therefore imposes heavy strain on physical powers. (cf. Condemnation of Adam, dreams of freedom from toil, etc.)

- (1) Probability that hereditary mechanism has become so adapted that a substantial amount of routine work is necessary to full physical development.
 - (2) Conditions of maximum productivity in physical work not clearly understood (cf. controversies as to eight-hour day; motion studies—Gilbreth; reports of industrial accidents; effects of routine labor on the young).
 - (3) Effects of routine labor, long prolonged, on plastic youth. Series of special problems.
 - (4) Note problems of "borrowed" or "derived" motive for endurance of distasteful routine (or drudgery)—from fear of direct penalty, fear of want or remote disapproval, desire for reward or wage, ambition, etc.
- j. Under modern conditions, physical organism of man subject to peculiar strains of the kind called "nervous" in contrast with more manual or muscular activities of primitive life.
- (1) Note whole classes of "brain workers" and of others (clerks, technical workers, readers) who are taxed mentally or nervously by their work. Probability that this involves exceptional kinds of strain to be prepared for by previous adequate physical development of primitive order.
- k. Woman, under primitive social conditions, is obliged to work no less hard,—often harder in terms of drudgery—than man. But with the appearance of a conquering class, governing aristocracy, then hereditary leisure class, finally holders of capital or large producers capable of "conspicuous waste" (Veblen), arises a demand for women to grace, decorate, or embellish life for commanding men. To preserve decorative qualities such women are freed from toil and natural growth restricted in many respects (small feet—of Chinese women,—hands, waists, soft skins, long hair, rounded contours,—often to be had only from half-arrested muscular development, coop-women); while "elegant" or "refined" occupations, not vulgarly useful, are prized (embroidery, dilettante art). Hence, from early age "hard play" and then "work" is taboo. Result is the production of powers and qualities characteristic of parasitic forms.
- Actual leisure class never very large, but its example in evolving a class of decorative women (and thereby intensifying and giving persistent predominance to feminine qualities making aesthetic appeal at age of mating) spreads into all classes where, under conditions of production with the aid of

capital and results of invention, men capable of producing considerable surplus to raise a family are found. Hence, widespread ideal favoring general development of decorative women. Results in America seen in vast numbers of women, ages 12 to 60, competing in decorating the person with clothing and jewels, in painting the skin, favoring arts of manicure and hairdresser, in cultivating as primary ends grace of person and arts of expression and display given by "finishing school" or prized in society. Physical organism doubtless deteriorates in the process, becoming incapacitated in large part for productive work, resistance to disease or weakness, child bearing and child nurture.

- (1) With rising standards of living in America and democratic society, almost all women aspire to be like the leisure class, decorative women. But note counteracting ideals of household arts teaching, of suffrage movement, of women educated in co-educational schools.
 - (2) If girls were reared exactly as boys, to what extent would they show a different or weaker physique? Question not easily answered but suggestions obtainable from facts as to physique of European peasant women, women of Sparta, Amazon revolt, etc.
 - (3) Extent to which excessive specialization of women for decorative purposes results in sterility, non-functioning of nursing organs, great pain in childbirth, pervasive aversion to children in general,—and hence in destructively low birth rate and poor mothering, not known, but doubtless critical in occidental societies (cf. studies of diminishing birthrate, especially in "middle class" society).
 - (4) A difficult problem involved in combining results of ideals of aesthetically attractive womanhood with results of requirements for adequate physical development. Some signs that aesthetic valuations are even now changing (ridicule of the mid-Victorian woman, premium on the athletic, outdoor girl).
4. Contemporary achievements in physical education (or rather in potentialities), therefore, have been due to several "social forces."
- a. The necessities of war (and the related "chase") have always forced to the attention of peoples, even the very primitive, the desirability of physical "fitness" for combat, endurance, withstanding of pain. Here play motives combine with training and give sports, athletics, gymnastics, horseback riding and even mountain climbing and swimming, historically cherished by the governing class or their "gentleman" descendants. Military training even yet involves arduous physical training of

novices selected for physical fitness (paralleled in no other calling, and only remotely imitated in priesthoods, locomotive driving, policing, and marine service).

- b. The healing of the sick, evolving from beginnings in magic, has eventually led to modern medicine, with its numerous achieved results in cure, and especially prevention of disease, and its mastery of ideals and methods for further advance.
- c. Outgrowth of medicine has been sanitation (including quarantine against spread of disease) and hygiene, in both of which recent evolution has been rapid.
- d. Numberless sporadic attempts consciously to conserve or promote physical fitness (apart from urgency of war pressure), characterize modern life, but few appear yet to have substantial foundations. These include: (1) Systematic "muscular training" in schools—calisthenics, gymnastics, posture drill, breathing drill, hardening exercises, etc. (2) Furtherance of the coöperative and competitive play instincts of adolescent youth into "directed" sports, athletics, etc. (3) Promotion of physical "exercise" for adults in sedentary vocations, as well as related avocations—golf, boating, riding, hunting, gardening. (4) Physical culture especially for those influenced by aesthetic appreciations of bodily grace of motion, beauty of form and color, etc. (5) Numberless faiths as to specific dietary and environmental regulations—vegetarianism, barefootedness, open air sleeping, sexual abstention, breathing, mental relaxation, etc.
- e. The public is becoming rapidly informed as to costs of disease, possibilities of prevention, the bearing of health on general happiness, and the possibilities of "socialized" medicine. Hence widespread interest in municipal and national hygiene and sanitation, development of physical education in schools, etc. Probably financial aid can be extensively forthcoming if valid programs can be devised.

5. But, in most departments of physical education, knowledge (beyond beliefs and fads) is yet very incomplete and obscure. The orientation, if not the objectives, of these phases now fairly acceptable; (a) instruction of hygiene; (b) health inspection; (c) provision of facilities for play; (d) conservation of physical well-being under artificial conditions imposed by education. But the following represent problems as to which faiths now held are clearly of doubtful validity:

- a. What are optimum standards which should, for given ages, either sex, and ascertained hereditary bases, control conscious procedure towards permitting, encouraging or (by training) forcing developing of; particular muscles or coördination of muscles; resistance to cold, wet, heat; specific forms of bodily agility; specific forms of endurance; abilities to "deal with"

difficult foods; resistance to communicable diseases; resistance to fatigue; specific postures and other forms of graceful carriage? As variants, what should be standards in training persons of given age, sex, probable future vocation, and ascertained hereditary basis to run, jump, swim, wrestle, box, creep, climb, endure pains, stand erect, etc.? It is submitted that nearly all prevailing faiths here are obscurely derived from military ideals and have no necessary relationship to contemporary vocations or living conditions. Confusion here is furthered by fact that, as now organized, gymnastics, athletics, and sports apply the principle "to them that hath, shall be given; and from them that hath not shall be taken away even that which they have."

- b. The functions of physical training as now given in schools appear to be of two types—recreative and developmental. (By "developmental" is here meant attainment of new powers, increased size, more complex coördinations; by "recreative," providing for any organ enough functioning to prevent deterioration or harm from disuse, when work or living conditions normally leaves it passive.) But the two ends seem confused, and each without standards of objective. For sedentary workers, should physical recreation be concentrated, intensive? If so, why not out-of-doors activities instead of gymnasium and calisthenics? Why not maximum exposure to weather? Should not customs, likings, and mechanics of recreation for youth be such as will probably carry forward into adult life? To what extent is that the case now—tennis, basketball, rowing, football, etc.? Are gymnastics, calisthenics, etc., really "developmental" or "corrective"? What is evidence?
- c. What is the fundamental place of physical work in basic physical development (various forms of endurance, disease resistance, and pain bearing, as well as strengths, and agilities). Is "work" older or younger, in racial evolution, than play? Is it not probable that the human body is so endowed as to require substantial amounts of physical work at age levels—8 to 12, 12 to 15, 15 to 18, 18 to 21, and the like to develop adequately against the needs of adult life? Do home and school conditions require or permit genuine physical work up to 18 years of age now for middle class girls? What is the probable health future of a person who from age six to eighteen really *works* hard mentally, but only *plays* physically? Does available evidence seem to point to probability that in highly specialized (factory, commercial), sedentary and other types of work supposedly imposing heavy "nervous" strains, the person who has laid preliminary foundations in "hard" physical work is at a decided advantage as to health, longevity? What, on the other hand,

is probable health future of persons accustomed to heavy work, who at age thirty, for example, enter upon nervous or sedentary work—typing, bookkeeping, etc.—and find few opportunities to continue “work” use of larger muscles? (Of course study of problems here suggested requires genuine distinctions between work and play—distinctions sentimentalists find it repugnant to make.)

- d. What is the place of the “gymnasium” in sound scheme of physical education? It is now largely a “traditional” agency—since its highly artificial apparatus is less valued than formerly, even by old fashioned “physical trainers.” Examination is needed of situations like following:

One hundred boys, ages 14 to 18, taking regular courses in high school. Programs require and permit two hours daily, physical training in costume. Adjacent to school are comparatively free streets, and three-acre play-ground. Assume director of training and moderate outdoor equipment, and dressing and locker space indoors. Is it (a) necessary or (b) desirable that covered space or heated space be provided for activities? Why? To what specific ends? For sake of hardening, development, concentrated recreation, why should not all the hardy boys of this lot spend their free time in open air in varied and strenuous activities in all weathers, keeping warm by exertion? After this period, dry rubdown, change into warm dry clothes and return to sedentary work. Could activities be devised for rainy, for snowy, and for sleeting weather?

Would this regimen be too severe for boys not vigorous? For boys 10 to 14 years of age? For girls, hair protected by bathing caps? Is not the gymnasium, often warmed, and rarely well ventilated, not a refuge of physical mollicoddles?

- e. What are the functions of the swimming pool? Assume people competent to keep clean at home. It is desirable to teach swimming. Why the expensive pool, the expensive warming and changing of water? Why not an open pool or pond or river (except in largest cities) to which learners run in bathing costumes in appropriate weather—any time in northern states from April 15 to November 1? Is it necessary or desirable to teach swimming from November 1 to April 15? If swimming is to be generally taught, has any one computed capital outlay and maintenance for covered pools, changed and warmed water, showers? Are not such delicately prepared swimming conditions ultimately disastrous to appreciations of rugged physical development outdoor life, “roughing it”? Does the pool make for “mollicoddling”?

CHAPTER VIII

VOCATIONAL EDUCATION: SOCIOLOGICAL PRE- SUPPOSITION AND CONDITIONS

1. All adult human beings (except rare parasites) must *work* to live. Man has far less precise instinctive equipment towards obtaining a livelihood than have bees, hawks, beavers, or other animals. Hence he must *learn* to work. But his species builds a social inheritance of useful arts and science which each individual must learn. He is also expected to learn slowly evolved customs of organizing work—division of labor, coöperation, token wages, all that we call thrift and industriousness. (Defensive and predatory fighting against animals and other men will here be included as productive work.)

Elders instinctively first lure, then compel youngers to make beginnings of work, and youngers instinctively imitate and otherwise try to learn working arts. Hence primitive domiciliary and field groups are first agencies of vocational education—and are so still for nearly ninety per cent of all workers.

All that conscious or half-conscious suggestion, instruction, and training which is primarily directed towards producing competency in vocation will be here called vocational education. Any agency whose primary function is to give such education will be called a vocational school, e.g., professional colleges, schools of army leadership, stenography, trades and farming. Apprenticeship and the still less organized types of vocational training where production is a primary, and education a secondary function will be called by-education, e.g., as on farm, shipboard, camp, home, store, shop, army. Apprenticeship (organized) is to be distinguished from "pick up" vocational education.

2. Through vocational arts man produces goods for support of self and dependents. But his total productivity at any time and place depends upon many factors besides personal skill and technical knowledge. These include: (a) presence of natural resources—game, nut trees, wild grains, domesticated animals, pastures, tillable land, navigable waters, forests, mines of clay and metals, coal, water power, fertilizers; (b) accumulated knowledge of arts, science, discoveries, customs of work—fire, domestication, tillage, sails, pottery making, iron working, printing, and the numberless acquisitions of last three centuries; (c) capital or stored wealth for provision of tools, means of work, support of workers—tools, ships, roadways, ports, shops, money, credit; (d) protection or social security in enjoyment of product—rights to use property for self or chosen associates, to devise bequests, to rent it for gain (interest on

capital, etc.—hence protective government and helpful customs towards stored wealth): (e) availability of means of division of labor, exchange of commodities, and increase and application of capital—trained leadership, transportation, banks, agencies of trade, international measures and exchange; (f) the general health, strength, intelligence, and social nature of the individual worker. Given the foregoing factors, the degree and kind of vocational education of the individual in relation to his native powers determine his productivity.

Social evolution changes above factors greatly. It adds knowledge and thereby multiplies productivity; it multiplies populations beyond point of diminishing returns; it raises standards of living; it enhances governmental security, but increases taxation therefor. Man ceaselessly struggles to produce *more* with *less* labor—and at same time he increases in numbers and in standards of living.

3. Primitive man works hard but sporadically. Conquest, in advanced stages, developed slavery and feudal or serf tenure and thereby enforced routine labor, the conquerors themselves being obliged to maintain persistent guidance, military control, and ceremonial prestige. Organization of production—mines, shipboard, factories, tropical farming—uses wage system as means of regimentation and persistent application.

Division of labor is first between sexes, then between old and young, then proliferates into numberless trades. Men have naturally superior physical mobility and aggressive impulses. Primitive women led in routine industries, tillage and domiciliary occupations. To-day young men seek the roving, outdoor vocations, women the indoor, *sessile* vocations. Old men give up roving and share in home arts.

Power driven machinery gives enormous advantages to "quantity production" which is best achieved through "standardized processes" and output of "standardized parts." Hence evolve endless specializations of labor—from primitive Nile tillage, brickmaking, wall building and boat rowing to modern mining, sugar growing, rail transportation, and factory production of locomotives, canned fruits and house doors.

Vocational education must largely follow economic evolution. Primitive production—still exemplified in home, small farm, seacoast fishing, small store, repair shop—can make good use of "pick up" vocational education. Highly evolved practical arts bring to great efficiency apprenticeship—which appears at best only where "pairs" of workers engage in handicraft pursuits or the real "trades" (best modern example is locomotive engineer and fireman). Highly specialized production lessens effectiveness of "pick up" vocational training, and destroys apprenticeship. But it differentiates many stages so simple that they can be learned in a few hours—the semi-skilled occupations of the census-maker.

4. Social efficiency now demands general substitution of direct vocational education for wasteful "pick up" processes and obsolescent apprenticeship. Partly to prevent frightful wastefulness of pick-up methods

in the "hire and fire" industries; partly to give needed science in farming, homemaking, repair trades; and partly to increase or maintain production where increasing populations, rising standards of living and diminishing natural resources threaten economic harm, school vocational education has prevailed in professions for years; but its methods for the specialized vocations still perplex the educator.

But without doubt next generation will witness: (a) social provision of opportunities for vocational education for all persons; (b) compulsory attendance on specified vocational schools of those who will not or cannot elect for themselves (on the same principle as compulsory work for vagrants now); and (c) scientific guidance of each person towards the work he can do best. The following will be among essential conditions however: (a) Because of specialization of vocations, vocational schools will have often to be located far from homes of students, necessitating perhaps subsidizing of travel and boarding (now exemplified in vocational schools of medicine, military leadership, and teaching). Exceptions will be found in: large cities; areas of localized single types of production—homemaking, farming, meat canning, cotton cloth manufacture. (b) Only a portion of the vocational education needed by the individual can be given at outset—especially where he enters the juvenile vocations. Much of it will come at ages 18, 22, 26, 30, even 40 as upgrading full time, or extension part time training—perhaps even for homemaking (at 22-25) and for various forms of real leadership (at 25-35). (c) The major part of direct general education for the rank and file of workers will have to be given before commencement of vocational training (age 6 to 16) with requirement that when vocational education is begun full *working* time (eight hours daily) shall be given exclusively to it. (d) Where *plant* or *equipment* requirements for training in practice of vocation are elaborate and expensive, vocational schools will have to be located partly or wholly in commercial establishments rather than in plants created primarily for school purposes (instances in: hospitals for physicians and nurses; railroads; banks; department stores; schools (for teacher training); shoe factories; coal mines; mercantile ship; meat packing establishments).

5. Recency of the "industrial revolution" (due to inventions, harnessing of natural powers, use of capital, subdivision of occupation, regional specialization of production, free migration of workers, etc.) gives rise to many social conditions involving problems of social pathology, the solution of which must profoundly affect future evolution of vocational education.

- a. Does specialized production unduly cramp or deteriorate men as to health, "creativity," "joy in work"? All men, or some kinds? All forms of specialized work, or some particular kinds? For specified classes, do bad results accrue chiefly in youth, or in middle life? Can ill results be offset by shortening

day's work and filling "leisure time" with amateur creative and pleasure giving "avocations"?

- b. Single women—in premarriage years by millions, and permanent celibates by hundreds of thousands—now work for wages "away from the home." In certain occupations they first "compete" with men, then, because of lesser demands, "capture" the vocations—elementary school teaching, indoor salesmanship, clerical work, "light" factory work, elevator operation. Shall we expect permanent "sex-differentiation" of vocations when dust of transition settles? Will girls find chief vocations in highly subdivided vocations? Is it feasible for the mature celibate woman worker in general to "compete" with the man of same age—in the trades, outdoor farming, railway work, the professions, "leadership?" How can his necessities of supporting a "real" family—two or three adults, four to six children—be safeguarded?
 - c. Regimentation of production throws direction into hands of those who organize processes and own or represent owners of tools—cleared land, discovered mines, erected and equipped factories, established "good will," etc. (control by "capital" or capitalists). This condition results from: relative perishability of capital tools (investments); mobility of labor; and superior initiative found among owners of capital). But aspirations for "industrial democracy" now gather force. These aspirations reflect wage workers' desires to share in "control," in policies. These are very natural—but are feasible programs to be derived from them—programs that would not involve loss of slowly accrued gains—always for dense populations with rising standards of living, be it understood?
6. A great variety of problems of specific aim in vocational education still await investigation.
- a. Vocational education is best defined as any form of direct or by-education the distinctive purpose or effect of which is to produce the skills, knowledges, ideals, or general experiences that function in a designated calling. The bookkeeper, by virtue of certain special knowledge, skill and integrity, is a producer of valuable service in ways that another man of equal qualities, due to heredity, environment, and general education, would find impossible. The specialized training that gave him this power constituted his vocational qualities of B class tailor, cook, preacher, kindergarten teacher, sailor, frontier farmer, electrical engineer, newsboy, mill-weaver, chauffeur, home-maker (in servantless, four-child home), plumber, proofreader, colonel, tea-taster, gambler, congressman.

- b. In peculiar degree, constructive proposals for vocational education require foundations of sound economic principles, scientifically tested where practicable, careful hypotheses where necessary. Problems showing, e.g., this need: To what extent in any field of work do supply and demand regulate compensation? Under what conditions is exploitation chronic? If the productivity of the individual is increased, how far can he retain for his own use increased product? Do such things as "overcrowded" occupations really exist? What is the economic status of the wife and mother in none-wage-earning homemaking? Are the fields for "unskilled" labor proportionately increased by the use of capital and applied science (invention)?
- c. Consult census, directories, etc., for examples of vocations.

7. Primitive productive occupations (including fighting) were simple and learned naturally (by imitation, suggestion, working with "achieving" instincts of youths). Chief differentiation was between sexes—women are said to have carried on most arts of tillage and craft. But each individual had to be capable of turning his hand to many things—as do farmers, small shopkeepers, homemakers, fishermen, to-day. What are now the distinctive vocational requirements of surviving "composite" vocations?

- a. But very early certain arts, including priestcraft and healing, became hereditary or were pursued by cults or guilds. Here begins recognized apprenticeship education—usually by-education, because the use of the learner for productive work was the primary object.

8. Conquest at first incorporated only children and women of the captured. In higher forms of conquest men are enslaved or left on the land as serfs. This introduces a long era—sometimes thought to be the real source of institutions making "civilization" (Oppenheimer, Gumpłowicz, Small), of control of conquered by conquerors, accompanied by forced labor, forced tribute, etc. Occupational differentiation and formation of castes proceed apace. Endless beginnings of systematic vocational training arise (cf. training of slaves, U. S., 1700-1863).

- a. How far will people become good producers, left to ambition of self and families? How far may compulsion for vocational education be necessary?

9. In civilized democratic societies ideals of productive work are held for all. Problems arise as to training for this work.

- a. Decline of apprenticeship system of vocational by-education. What were the merits of apprenticeship for: professions? trades? agriculture? office callings?
- b. Why does "factory" system impair efficiency of shop by-education?

- c. Does perfection of machinery in general diminish need for full vocational education? (Note: automobile, locomotive, type-writer, loom, mowing machine, shoe-making machine, sewing machine, power saw, steamship, telegraph, printing press, power forge hammer, rifle, power drill, explosives—for mining, Bessemer process, safety razor, gas stove, photo-engraving).
- 10. Problems of women in industry—the *modern* problem of women following productive work away from home. (Schreiner.)
 - a. Census statistics show rapidly increasing number of women in commercial and industrial pursuits. What are age distributions and how related to marriage age?
 - b. Physiological effects of highly specialized vocations into which women go—what are the problems?
 - c. Problems of the vocational education of girls and young women for specialized, pre-marriage wage-earning.
 - d. Problem of wage-earning for home-making women.
- 11. Problems of vocational education for home-making women.
 - a. When is it desired (motivation)? When is it necessary? When can it most economically be offered (or acquired)? Of what shall it consist?
 - b. What are essential features of B class home (non-servant, 3-6 children, \$900-\$1500 standard) to-day?
- 12. Problems of vocational education for specialized industrial workers (men).
 - a. Transitions: early juvenile occupations; late juvenile; early adult; late adult; directorship.
 - b. Direct, full-time education; direct part-time education (preparatory, extension). Analysis of by-education of occupation.
- 13. Problems of vocational education for trades. Trades in the older sense of the word are disappearing. Do dynamic industries involve trades?
- 14. Problems of agricultural education; professional education (men); professional education (women); commercial education; nautical education.
- 15. Vocational guidance—its place and possibilities. (Bibliography: Brewer and Kelley, *A Selected Critical Bibliography of Vocational Guidance*, Harvard University, 1917).
- 16. Organization problems of vocational education—full-time, part-time, continuation, preparatory, extension.
- 17. Pedagogical problems of vocational education—practice, productive work, technical studies, sociological phases.

CHAPTER IX

SOCIAL EDUCATION: SOCIOLOGICAL PRESUPPOSITIONS AND CONDITIONS

1. Man has large equipment of social and of individualistic instincts, but in most cases these are not so definite in operation as corresponding instincts among animals, hence are plastic to agencies of direct and of by-education. In small children we readily recognize: (a) "other regarding" instinctive manifestations which are species of affection, helpfulness, coöperation, sympathy, pity, etc., and (b) "self-regarding" reactions, such as species of greed, selfishness, envy, anger, avoidance of companionship, vindictiveness, etc. In later life other social instincts become active; but effects of social environment obscure the characteristics due primarily to "original nature." These include species of sex and parental reactions, gang coöperation, honor, conscience, religiousness, racial antagonism, mutual aid, competition, individual aggrandizement, altruistic sympathy, etc.

Social evolution early imposed upon man necessities for coöperative defence, family rearing, work, and conservation of social inheritance. Effective coöperation (pragmatically speaking) becomes one important condition of survival of any strand. Hence evolved societies, social institutions, endless forms of social organization towards group solidarity. Perhaps for hundreds of thousands of years these groups were small—families, hordes, clans, tribes; but evolution of "large groups" during last ten thousand years has been most rapid—giving cities, nations, churches, unions, federations, etc., with extensive possessions, spiritual and material, to cherish and transmit.

Hence greatest problem of "social education" in this era of "large group" evolution is that of so expanding (or even replacing) "small group" virtues to serve the larger social order where most of one's "fellows" are no longer visible "associates" but invisible "federates." Social leaders work ceaselessly to transform the intensely coöperative "brotherhood" of the family or clan group into the "brotherhood" of man.

2. The term "social education" will be here used to include all forms of direct and incidental education primarily designed to conserve and promote approved designed group solidarity. It includes: (a) all forms of "moral" education—these words chiefly connoting efforts to improve "small group" or "associate" group relationships; (b) all forms of civic education—centering chiefly in efficient membership in town, state, and nation; and (c) all forms of religious education—these being interpreted as designed to bring man into right social relationships with invisible (and especially

ascendant) personalities. The term "ethics" can be understood as denoting the "principles of social conduct."

3. Various varieties of social education are very ancient. Discipline within the family group of youngers by elders is incessant. Street association of children involves constant and forceful reshaping of individualistic or "other group" dispositions towards locally dominant standards. The school, church, workshop and club find constant need of enforcing "order," especially as part of "breaking in" the young. Mother Grundy is more watchful than police in sustaining village morality. Priests are among chief educators as to many social virtues. In time of general need or inspiration seers, prophets, poets, messiahs arise to orient socializing aspirations and programs. Modern nations endeavor to use their school systems as means of "socializing" the young. We desire to "Americanize" the recent immigrant.

4. Using the terms "virtues" and "vices" inclusively to designate approved and disapproved forms of social behavior, social analysis shows existence of virtues of "conformity" and virtues of "initiative." Standards of social conformity are found in customs and conventions, laws and commandments, rules and regulations, precepts and dogmas, as developed by various types of social groups, nations, tribes, corporations, armies, schools, unions, families, congregations. Conformity is enforced through numberless forms of penalties—appeals to fear—and through equally numberless forms of approval—appeals to love, ambition, etc. Religion at times has great freightage of terrors and joys as incentives; similarly political organizations, communities, vocational organizations.

Standards for the social virtues of initiative are less capable of definition. The group views with suspicion the innovator, rebel, heretic, free thinker, inventor, bohemian, radical, because by experience it knows that these are usually self-centered or at least visionary individualists or "small group" devotees, capable of "tearing down the old house before they have any real command of materials for the building up of a new house." But, once having proved (usually by "success") their constructiveness, the daring and foresight of prophets, revolutionaries, inventors, reformers, sect founders, and liberals is approved at least by newly developed groups. In a normally evolving social order, of course, "cakes of custom" should not be allowed to form so hard that only revolutionary dynamite can break them; hence the desirability of having many members in each group competent and disposed to practice virtues of initiative—leadership, originality, vision, liberalism, progressiveness.

In static eras of group evolution forces of social education are naturally chiefly directed towards producing virtues of conformity. "Authority" (of God, church, ancestors, kings, constitutions, laws, conventions) dominates. Elaborate mechanisms, of social control are produced—revelations, creeds, codes, regulations, red tape, ceremonials, taboos, traditions. These constitute so much a social environment for the young that habituation is largely unconscious. Nevertheless elaborate procedures of direct social

education are also found. Rituals are drilled, catechisms memorized, specific emotions repeatedly kindled and hero (exemplar) tales endlessly retold.

In dynamic eras sway of authority weakens, at least in some groupings. Independents follow new leaders, flout old customs, cheer new enterprises. But to conserve gains heretofore the new groupings have had to establish new conformities. So we say that only recently has there developed a "tradition" of progress, a prevailing belief in, and acceptance of the consequences of, social evolution. Shall we yet learn to prize always the sincere, able nonconformist? Perhaps social science will yet enable us to distinguish wholesome from poisonous qualities of initiative, to cultivate the right kind and early to root up the wrong. "Good citizenship" now in America vaguely idealizes at least some virtues of independence, non-conformity, liberalism, progressiveness. But in complex societies, and having in mind the inexperience of the young and the shortsightedness of rank and file, "liberalism" may be like fire and water—a good servant but a disastrous master.

5. The final tests imposed by nature on group evolution are, of course, survival—not in the immediate, but in the ultimate, sense. War has always been the most visible and dramatic test of group solidarity. Other tests may be equally crucial, but less intelligible—to diffuse intelligence, to promote justice, to conserve and improve stock, to store capital, to utilize natural resources, even to hold sound religiousness. But history writes mostly of war—because the storm in a moment tests years of patient work of builders.

In one sense "might" or "social efficiency" makes "right"—that is, the might of individual healthfulness, of sound family life, of even-handed justice, of democratic government, of genuine individual freedom and of effective education—because these give the stone and cement to structure capable of weathering social storms.

History clearly shows rapid increase in size and complexity of most social groupings (especially the political and economic) during last few centuries. Survival here, as in case of ancient empires, may be threatened more by agencies of internal dissolution than by agencies of external aggression. Hence needs of new types of social education.

Efficacy of all forms of "authoritarian" social education is clearly declining, due to spread of habits of scientific thinking and aspirations for democracy. Note diminishing place of creeds, taboos, dogmas, ceremonials, ancestor worship, anthropomorphism of deities, conscription of understanding, appeals to emotion, vested rights of rank, etc. Note also increasingly critical attitude towards laws, constitutions, private property, traditional leadership, classic standards, and non-interference with operation of natural laws of "supply and demand" as regulative of standards of exchange. But methods of "rational" or "scientific" social education for "large group" participations are still largely wanting.

6. Endless experimentation—usually poorly directed—now proceeds in social education.

- a. The discipline of home, school, church and courts becomes more rational, less directly coercive, and somewhat more scientific in objectives.
- b. For spontaneous social activities are being increasingly substituted purposeful ones—scouting, clubs, co-education, part-time production, practical arts, military training.
- c. Community civics, government, "other nations study," economics, social science, "socializing" literature, are all being developed as "beta class" means of social education.
- d. Social control of the photodrama, reconstruction of the juvenile court and juvenile prisons, and scores of other means of improving the by-education of environment are being experimented with.
- e. The teaching of history can obviously be made a means of social education—either "colored," partisan history or "scientific" history. But outside of use as means of patriotic partisanship, it is doubtful if objectives are yet satisfactorily defined.

7. Describe large basis for social education in individualistic, small-group, and large-group instincts. Note especially:

- a. Theory that primate ancestor of man was not gregarious—possibly solitary, gorilla-like. (Compare man with gregarious animals.)
- b. Early appearance in children of individualistic instincts—property, self-protection (lying, fighting), "selfishness," self-centeredness of adolescent.
- c. Also early appearance of "small-group" instincts—family, clique, playmates, gang, etc.
- d. Tendency of primitive men to intensify "small-group" development, and antagonize "large-group" interests—clan, brotherhood, union, feud, Greek *vs.* barbarian aliens, pagans, nationals, conflicts between small and large groups as regards antagonisms, virtues, etc.
- e. That the problem of social education is found in transforming of "virtues" and modification of attitudes developed from simple instincts—sympathy, pugnacity, property, coöperation, toleration, etc.

8. Primitive societies had ever-present problems of social education. Peace and coöperation were essential within group if it was to sustain and defend itself.

- a. War has always been the most visible and dramatic test of group solidarity. Other tests (to reproduce well, to migrate, to develop capital, to diffuse intelligence, to control natural

forces, to resist sloth and licentiousness, to administer justice) are doubtless equally crucial, but not so evident, visible. Hence much of history is that of war.

b. Religion has its largest function in promoting the fears, aspirations, taboos and rewards making for social coherence (when pure, genuinely functional; it, too, is subject to degeneration at times).

c. Note the use of art in primitive "social control" and "social welding."

9. Societies seem to pass through a mediaeval (early civilization) stage when "custom control" (dogma authority, belief, tradition, "divinely sanctioned" laws) plays a very large part.

a. Institutions now develop (creeds, theologies, constitutions, courts of justice, courts of ruling classes, castes, ceremonials, imposing art—literature, architecture, drama).

b. We—too near breaking of periods of this era—are prone to evaluate its results in terms of its declining, "old-age" manifestations. In its early stages, doubtless a much needed and splendid advance beyond barbarism. (Note symptoms of breakdown of custom control—in religion, politics, economic institutions, domestic institutions.)

10. Modern societies strive to emerge on the plane of rational social control.

a. Democracy strives to make the individual a person—an end, not a means.

b. Modern man aspires to free thought, free speech, free worship, free migration, free business, free domesticity, free government, within limits of group safety. (cf. Reformations, revolutions, higher criticisms, etc.)

c. Free man, leading in these matters, is distressed to find serfs, bondmen, slaves, women, even children, following, imitating, asserting rights. He resents the inevitable spread of democracy and free thinking outward and downward. Hence perennial present conflict between authority (custom rule) and strivings of democracy.

11. Problems of social education to-day, then, must take account of and use manifestations of democracy.

a. Note the diminishing place of creeds, dogmas, taboos, unintelligible prohibitions, ceremonials, emotional appeals, respect for authority (as such alone), conscription (of will and intelligence), sacredness of private property, obedience to scholars, etc. Note general indifference to laws, as such.

b. Note demand for scientific justification, approval of intelligible ideals, respect for personalities, regard for visible social service.

- c.* A period of transition is always one of disintegration, danger of revolution, decline of many valuable customs, standards, etc. But "the clock does not turn back."

12. Objectives of profitable social education of two kinds: (*a*) provision of right conditions for social development; (*b*) provision of definite objectives for social training and education.

- a.* Social control, in interests of right social education, of home, street, clubs, "movies," literature, police power, occupational life, all now practicable. Social provision of broader group activities (Boy-Scout, school government, public service, military training, co-education, economic part-time production) also possible.
- b.* Community civics, specialized literature of idealism, government, study of nations, economics, ethics, probably all good means, at appropriate stage of development, of direct social education.

CHAPTER X

CULTURAL EDUCATION: SOCIOLOGICAL PRESUPPOSITIONS AND CONDITIONS

1. Participation in usual forms of group life, apart from vocational and political relationships, requires that each individual shall be possessed of certain essentials of the social inheritance—comprehensible speech, common knowledge, manners, tastes, etc. Beyond this, individuals and certain cultural groups are greatly advantaged in happiness and general usefulness, through extensive development of one or more out of a vast potential variety of non-vocational interests, appreciations and powers. The term “culture” as here used is restricted to its more common usage, as inclusive of a wide range of intellectual and aesthetic interests, appreciations, powers (or otherwise tastes, ideals, manners, standards), largely individual or personal in character, and having relatively little direct bearing on vocational proficiency or effective participation in groups functioning for moral or civic ends.

- a. The division “Cultural Education” is designed to include, first, those objectives of education—direct education and by-education—embodying that *common* knowledge and appreciation which do not clearly function in vocations, useful group-activities, or personal physical well-being, and which in a civilized state are sought on behalf of all persons. Some of these objectives—e.g., vernacular in spoken and written forms, elementary arithmetic, local geography, manners, and everyday reading—have functional values in all kinds of education; but it is clear that their largest value is in establishing a common culture. The beginnings of literature, art, science, history, and world geography also enter as elements of this *common* culture.
- b. There is included, in the second place, all those objectives that are sought on behalf of individuals for the sake of enriching the personal life, especially as regards intellectual and aesthetic interests, when these are not specialized for vocational, social, or physical ends. Include various “interests” in ancient history, current events, genealogy, numismatics, archaeology, ethnology, poetry, essays, fiction, biography, wit and humor, English grammar, Russian literature, Greek drama, Shakespearean drama, contemporary drama, “ice age” geology, neighborhood flora, mountain exploration, foreign travel, violin music, ancient art, modern architecture, eclipses, dress, dancing, entertainment, decoration of home, hobbies, avocations, etc.

2. *Cultural play*, analogous to physical play, is doubtless an essential means to cultural growth. Its incentives are intellectual and aesthetic curiosity, interest, etc. Because the actual final functionings of these play interests are obscure (as indeed they also are in physical play) parents, educators and others responsible for provision of means, are apt to neglect them in preoccupations with more tangible ends. Educational innovations, urged by Froebel, Herbart, Parker, Elliot, and Dewey rested partly upon recognition of these considerations. Complete education requires, first, full provision for cultural growth (of natural, unartificial kinds—beta objectives) and then of cultural training (of purposive kinds—alpha objectives). For example in promoting linguistic culture: it is desirable, first, that the young child grow in an environment of correct and abundant speech—vernacular, and if facilities are available, one or more alien tongues; then, in relative maturity, that he enter upon systematic training towards more refined or difficult powers and appreciations—in vernacular and other.

3. "Education for leisure" is an approved ideal of "cultural education." In a sound economic order all have some leisure or time apart from vocational, civic, and physical necessities (work, politics, sleep, exercise); this leisure will be filled with sociability, amusement, recreation, and attempts to satisfy aesthetic, intellectual, and physical desires. These may be of a low order and deleterious—physical indulgence, degrading sports, hurtful amusements. With right education, more enduring tastes and interests can presumably be established towards the enrichment of individual, and, indirectly, of social life.

- a. In social evolution a conquering predatory class has often produced a minority of adults who have had a disproportionate amount of leisure. In periods of high social idealism, these, competing in higher forms of utilization, have promoted refinement of manners, ceremonials, literature, fine arts, decorative arts, building, sports, and even science, research, etc. Under other circumstances, they compete in ornamenting the person, fostering elegant parasitism, and in "conspicuous waste." (See Veblen's *Theory of the Leisure Class*.)
- b. In industrial society or one having land-owning aristocracy, accumulators of capital, and especially their descendants, constitute successors of leisure class, and these also compete in special cultural developments, sometimes beautiful, sometimes sordid.
- c. Few men in America now willing to admit membership in, or exhibit characteristics of, leisure class. That prerogative is sometimes left to their decorative women—usually wives and daughters, but sometimes specialized entertainers.

4. The transmission of the "social inheritance" of culture becomes a large purpose in societies, even when practical consequences of such trans-

mission are not obvious. Schools are created to this end in cases where by-education of other agencies would not suffice.

- a. During most historic periods premiums were placed upon tellers of tales, singers, readers, sages, ritualists, teachers, historians, etc., who could thus transmit. Equal importance attaches to monuments, inscriptions, runes, museums, libraries, galleries, place names, word spellings, commemorative feast and name days, etc.
- b. A crude, strong people conquering a relatively refined, culturally advanced people gives rise to curious new interests. (cf. Heroic Ages in Greece, Serbia, Scandinavia, England.)
- c. The "mining out" of the cultural riches of a past that has become overlain creates a peculiarly intense "backward looking" set of cultural interests. The memorable example of the Renaissance, "discovering" Roman literature, then Greek and Hebrew. (cf. Literature of the Renaissance.) The impetus given the study of classic languages (and to lesser extent, literatures) persists to this day, especially outside of Latin countries.

5. The "humanities" or "humanism" signify those cultural studies prized especially on behalf of the more influential men of society, the "leaders," by which they are enabled to see the social or human side of the world in its larger aspects. It is expected that "social," i.e., civic and moral, results will derive, hence these studies, if shown so to function, might be classed as social. (Note that some observers rank the "social science" studies—now so popular in American colleges,—as the "New Humanities.")

- a. The problem as to how far it is expedient or wholesome for the highest approved culture of a people to be made thus dependent on the past is still important. Too much dependence on the past may paralyze initiative (cf. Nietzsche, *The Study of History*). For purposes of conservation, reliance on static order, doubtless use of the "past" for "followers" is desirable. But probably only very exceptional "leaders" who give social variability can profitably utilize the past, except as a means of explaining or confirming or negating hypotheses already formed.
- b. Note thesis developed later that probably the "past" in history and literature should be studied only in the light of good grounding in the present.

6. Culture, for purposes of education, should be distinguished into (a) common culture—which it is expected all in a democracy shall possess, and (b) individual culture, the possession of the interested individual and his congenial fellows.

- a. We assume certain degrees of proficiency in the oral and written language arts—speech, writing, reading,—interest in general reading, and some knowledge of the best literature, comprehension of simple arithmetic (arithmetic of utilization), acquaint-

ance with common facts and principles of history and geography, and appreciation of simple music and plastic art, as constituting the basis of common culture.

- b.* Beyond this, education—in direct and indirect forms—makes provision on a public, endowed or commercial basis, for endless special forms of special cultural development along lines of literature, art, music, history, science, crafts, sociability, travel, etc. Within limits, it is usually agreed that society can well afford at public expense to foster these forms. (Note: classical studies in secondary schools; varied "liberal" courses in college; endowed and state galleries, museums, theatres, expositions, public art, etc.)

7. "Liberal education"—here used to include both cultural and social education—can be interpreted profitably as "education for utilization"—thus placing it in contradistinction to "education for production" (vocational education). Utilization not necessarily a final end itself, but in such fields as literature, science, art, crafts, sports, travel, ends beyond utilization (health, sanity, "progress," "rich personality," character, salvation) are difficult of analysis. Hence, as in the case of play, we say gratification of aesthetic and intellectual interests on highgrade play basis is a justifiable end in itself (not to be confused with "art for art's sake," etc.).

- a.* Man is a potential utilizer of the literature, art and music of all ages and climes; the scientific knowledge—mathematics, astronomy, chemistry, mechanics, sociology, geology, ethnology, etc.—that the experience of the world has rolled up; the institutional life that has become organized; the endless forms of association with unseen personalities which we call religion; the varied forms of association which make family, community, and other forms of group life; the services of unnumbered specialist workers in medicine, law, accounting, tillage, etc.
- b.* Man's political relationships (the ends of "good citizenship") can be assembled in two chief categories: (*a*) Good citizenship consists, first, in conforming, in fitting to the established order, in obedience to laws and serviceable conventions—all expressed in the passive virtues of obedience, patience, industry, submission, temperance, thrift, etc. (*b*) For many, good citizenship consists also in taking the initiative, being aggressive, breaking with routine and established order, criticising laws and their executors,—all expressed as active virtues, such as non-conformity, independence, radicalism, free thinking, organizing of new movements, etc.

But as regards many civic functions, man is chiefly a coöperative employer of specialist service—a joint utilizer of that service. Hence social education may be interpreted partly in terms of making man a good chooser, discriminating buyer, generous rewarder of specialist service—a socialized consumer.

CHAPTER XI

MISCELLANEOUS OBJECTIVES

A. MENTAL TRAINING

1. The "trained mind"—like the "trained hand," the "efficient body," "good-character," and "good citizenship"—has long been a "faith objective" in education. The aspiration takes specific forms—training persons "to think," "to concentrate," "to observe," "to be guided by scientific method," "to be thorough." We say that under certain systems of teaching men learned "to work," "to have common sense," "to be exact," "to be self-reliant." Uncritical thinkers easily develop beliefs in educational "simples" or "panaceas," for example: that where study or work or the necessities of life impose close observation (or attention, or reasoning or self-reliance) of one species or variety, substantial increments of power are gained for all varieties of the general activity. Hence the superstitious vogue of Latin, grammar, mental arithmetic, algebra, sloyd, calisthenics, dead language classics, and fine needle work as "disciplinary" pursuits. Hence also, vogue at times of verbal memorization, formal logic, certain kinds of army drill, political and religious rituals, and, possibly, ceremonial observances.

2. Critical analysis of visible mental phenomena, quite apart from study of psychology, can dispel some superstition as to "mental training" (and equally, "moral training," "physical training," and "cultural education").

a. Every savage (and animal) has in highly developed form certain species of observation, attention, verbal memory, common sense, patience, industry, loyalty, manual skill, etc. But he is deficient in many other varieties that count much in civilized life. Every farmer, hunter, fisherman, factory hand, street gamin, jail bird, and traveller has not only a variety of well-developed specific powers of kinds noted above, but also more composite forms of "reasoning," "judgment," "imagination," "aesthetic appreciations" and the like; but along with these manifest deficiencies in other species.

b. It is manifestly practicable to give "specific" training in endless varieties. Given time, direction, motive, etc., every normal individual can be trained: to be "observant" of stars or of game signs, or of customers' faces or of disease symptoms or of enemy forces; to "attend" closely to military directions, typographical errors, concert disharmonies, or the "form" of baseball players; to be "exact" in pronunciation of French, lace-making, shooting a rifle, typing, or playing the violin; to "think

out" the difficulties of burglarizing a house, beating an opponent at chess, erecting a new bridge, or providing a dinner.

- c. Also it is clear that men inherit different potentialities for some, if not all, kinds of possible training. Just as some are endowed with bodies that easily permit of learning many varieties of skills, so others seem to have nervous matter or mechanisms, easily permitting great advances in mathematics or verbal memorization or science or business organization.
- d. But popular opinion and educational theory have probably greatly exaggerated possibilities of "spread" of training of one variety to another or of a basis of "general" powers, deceived partly by mystic or magic of "general terms." Reactions essentially superstitious can be evoked by such magic terms as "common sense," "ability to think," powers to read "the printed page," the "scientific imagination," sense of the "beautiful," loyalty, culture, etc. Patriotism "is the last refuge of the scoundrel." So the magic of mental training is the last refuge of traditional objectives of education in process of being defeated by increase of knowledge—Latin, Chinese classics, sloyd, gymnastics, military drill, verbal memorization, mechanical drawing, needlework.

B. EDUCATION FOR FAMILY MEMBERSHIP

Importance of the family as a social group suggests to some contemporary writers desirability of "effective family membership" as a composite objective of education. But this probably unserviceable objective because:

- a. "Family membership" includes various quite unlike relationships—filial, fraternal and parental. First and second involve chiefly certain virtues of conformity, third of initiative.
- b. But, fundamentally, the family is only one type of the various social groups in which each individual has membership. Education successively in the filial, the fraternal, and the parental virtues constitutes therefore simply part of social education for group life. (See social education for differentiation of numerous social groups in which normal individuals have membership, and differentiation of the specific virtues required for each.)

C. EDUCATION FOR LEISURE

In current discussion this is frequently urged as an important composite objective. Apparently the ideal is based upon facts that: (a) Under modern economic conditions the amount of time each adult has free from vocational obligations and necessities of rests tends to increase; and (b) that in absence of proper habituation, leisure time is spent in profitless if not degrading pursuits. (It can be assumed that each individual will, with-

in his opportunities, spend his leisure upon such diversion, recreation, and culture as then appeals to him.)

1. Studies are needed as to prevailing facts of disposition of leisure now. Until recently some men spent much leisure in saloons. Now men of means resort to clubs. Where facilities are available, adolescents spend time on sports. Social activities incident to courtship claim many. Moving pictures now provide diversion for millions while use of fiction and other easy reading claims many others. Before extensive proposals for "education for leisure" are made, we should know: (a) Since *all* persons now spend their leisure in somewise, what are the types of diversion (and what the social groups among whom they prevail) that are deleterious or at least of relatively low value? (Note ease here with which moralists and pedants can impute artificially low or high valuations.) (b) What are, for persons of given ages, occupations, native interests, and the like optimum types of diversion, recreation, avocation, social intercourse, worship, and self-culture that should be held as specific objectives of educational programs in elementary schools, high schools, colleges, vocational schools, extension courses, etc.

2. Probability suggested that "education for leisure" will not prove a workable composite objective. Its component specific objectives properly belong in other categories, e.g., physical recreation and diversion; social (sociability) recreation, diversion; cultural recreation, diversion; avocations for incidental gain, recreation, diversion. Study of the valid objectives of literature, practical arts, travel, fine arts, social games, sports, etc., should establish their values for profitable leisure time occupations. On negative side certain wasteful forms of use of leisure—dissipation, vagrancy, gang association—must be combatted through education in hygiene and moral behavior.

CHAPTER XII

AGENCIES OF EDUCATION

1. The objectives of sound, constructive social action are to be realized largely through control of the conditions which make of children men and women capable, as far as practicable, of realizing the known and approved standards of a wholesome and progressive society.

- a. These conditions may, for practical purposes, be considered in four classes—namely, those due to: (a) biological heredity; (b) nurturing environment (or material environment); (c) by-education of social environment (family, church, street, shop, clique); and (d) direct education of school and other agencies of primarily educational purpose.
- b. The biological fact of the long infancy (plastic period in the human species—product of evolution change) constitutes in part the basis for control, especially of by-education and direct education.
- c. Other bases are found in (a) exceptional adaptability of the human individual as regards food, shelter, work, general educability, mobility; (b) accumulation of “social inheritance” of knowledge, ideals, institutions, inventions; and (c) capacity for joint or coöperative effort.

2. Biological heredity, for social economy, constitutes largely a fixed “given quantity,” but under general designation, “eugenics,” some proposals now advanced for social control of marriage towards favoring increase of stocks or strains of most promise (cf. Galton, Davenport, Conklin).

- a. Doubtless eugenic results have been achieved in the past—but only in part purposefully—as where upper castes clung to “pure mating”: (a) Weak stocks and strains have been first eliminated in war, famine, settlement, etc. Perhaps modern war reverses natural selection; (b) strong men claimed ablest women and in largest numbers (wife seizure, wife purchase, polygamy). Perhaps natural selection is also reversed in modern middle-class society,—cf. studies of diminishing birthrate among classes with high standards of living; (c) upper castes have sought to prevent caste mixture or mongrelizing; (d) possibly the usual processes of courtship selection have favored the strong, intelligent, beautiful; and, (e) possibly, except where competition for higher standards of living is fierce, the strong, intelligent, moral and persistent have, as parents, favored preponderant increase of adults from their families.

- (1) Give illustrations of eugenic selections now operative; also of dysgenic selection.
 - b. Negative eugenics proposes social action to prevent unions of those who would probably bequeath hereditary defects to progeny. (Proposals?)
 - c. Positive eugenics looks to favoring social action designed to increase those of good heredity. (Proposals?)
 - d. The whole subject of eugenics is still in the stage of discussion and examination of fundamental facts upon which tentative proposals may be based. (e.g., "Standards of selection"; interference with rights of individuality"; problems for democracy—"ethics of the barnyard.")
3. Nurturing material environment here includes those factors of food, shelter, security, rest, play activity, work activity, that affect the growth of the child from birth to maturity. To the social economist, many of the elements of these factors are also "fixed given quantities"; while others are increasingly within man's control.
- a. Primitive man had little besides natural protection against climate, limitations of food supply, danger from enemies. Civilized society devises endless means of procuring protection from natural climate (housing), of insuring permanent and adequate food supply (agriculture, cooking, storage), and of fencing off enemies (animal, bacterial). In his zeal, he sometimes cuts off play activities (physical, intellectual, emotional) and over-emphasizes work activities, especially for the young.
 - b. Nurturing environment, if too favorable, may produce "hot house" social conditions, precocious development, specialized development, "softening," and so result in termination of stock or strain. (cf. Sterility of thoroughbred animals, historical ascendancy of peoples coming from "hard conditions," alleged degeneracy of "city dwellers." Illustrate from: luxurious society; "women of ease"; "soft children"; excess of nurture, etc.)
 - c. Hence probability that heredity sets definite limits beyond which the material environment cannot safely be rendered more favorable.
 - d. Nevertheless, the rational control of material environment towards providing a reasonably "protected childhood" for every child received by society constitutes a large field of positive action for social economy. Direct education of children towards competent parenthood constitutes one essential means. Important additional fields for investigation are: (a) Control of size of family; (b) state aid towards meeting of parental responsibilities; (c) development of sanitation; (d) increasing social control of economic forces. (What are some current proposals? What are public health authorities doing?)

4. The child's participation in social life (his groups) results incessantly in developments and changes essentially educational in character. Where this education results as a by-product of activities not primarily educational in character or purpose, it is here called by-education (in contrast with direct, purposeful or formal education in school, etc.).

- a. The child is instinctively a learner, and, within limits, his elders—parents, and other adults, older brothers, sisters, and play-fellows,—are instinctively teachers. Note the extent to which the child thus acquires speech, conformities in behavior (morals, manners), knowledge, orientations of feeling (values, prejudices, sentiments, ideals), working skills, forms of play, etc.
- b. Note that primary (i.e., determining) functions of family (or home), shop, (farm, office, road, boat), church, playground, street, club, press, stage, police power are not education. As they become better adjusted to the discharge of their functions, these agencies may become less valuable as a means of right by-education (cf. contemporary examples).
- c. On the other hand, sometimes, moderate conscious social adjustment may greatly enhance right educative possibilities of these agencies without material impairment of primary functions (cf. contemporary achievements in housing, homemaking and other forms of vocational coöperative education, juvenile court, educational "movies," supervised playgrounds, Sunday schools, boys' clubs, etc.).
- d. By-education is the inevitable result of social participation on the part of the child. Such by-education must be evaluated as good, or bad; expansive or restrictive (of social personality); social or anti-social. A part of the functions of direct education may be offset by bad results of by-education (e.g., speech, morals, narrow group loyalties, combative tendencies, etc.).
- e. For social economy, important fields of action are found in (a) fostering right educative possibilities of social agencies without impairing primary functions; (b) providing for detachment of child when adverse influences dominate; (c) fostering agencies of direct education to meet deficiencies in by-education of special classes.

5. Agencies of direct education are created by society to meet special needs in development of young or plastic individuals, not met in satisfactory degree by existing agencies of by-education. Hence, all working or practicable definitions of required functions of agencies of direct education, while conforming to the general standards of sound social economy, must, in general, be stated in terms of special and distinctive ends to be achieved.

- a. Purposeful education towards discharge of military functions is one of the most ancient forms. At times, specific portions of

vocational education have been isolated from by-education (apprenticeship) of productive activities, as direct education. Direct education in credal forms and ritualistic activities was long organized apart from by-education of worship. Direct education for prospective rulers (princes, statesmen, and for culture of leisure class) resulted in schools in early societies where conquerors and conquered produced castes. High valuation of literacy for Bible reading, voting, vocational capacity, etc., gives schools for reading and writing vernacular.

- b. Note at present scores of specific aims suggested for direct education, resulting in general from increased comprehension of valuable results to be achieved by direct education. (cf. Special forms of cultural, physical, social and vocational education urged for inclusion in public schools.)

6. Effective coördination of the various developmental and educative agencies usually operative becomes increasingly necessary as one purpose in sound social economy. "Modern social economy" exhibits numberless attempts largely sporadic and half effective as yet at such coördination.

- a. The "school" (for direct education) is the most purposive and, consequently, the most expensive of educational agencies. Its functions are properly "residual"—that is, it is designed to produce those necessary or desirable results which other agencies, less expensive, cannot adequately perform. Note as examples: (1) vernacular speech is learned at home; but advanced speech, and written languages largely at school; (2) most vocations have been inexpensively learned through "pick-up" methods of experience; but difficult ones, medicine, military leadership, stenography, elementary teaching, have long been learned in schools; (3) until very recently no English schools attempted to "teach" literature (that being held as a proper function of the home); but American schools have long attempted that function—fruitlessly? (4) until recently it had not been assumed that, except for certain vocations—usually military or for "beauty culture," schools should be provided to aid physical development; now we think certain ends of physical training or development can only be met by schools; (5) technical schools (engineering are best examples) systematically teach certain forms of technical knowledge, as well as give practice in some arts (drawing, laboratory technique), but "practical phases" of vocation must be learned in field as belated apprenticeship (note that medicine and teaching were once in similar basis).
- b. "Public Schools" controlled by society at large have peculiar residual responsibilities, at least where the collective well-being is involved, as to: (1) providing "compensatory" education to offset special deficiencies of agencies of by-education—family neglect, residential slums, deprivation of vocational opportuni-

ties, etc.; (2) provision of educational aid in emergency situations—physical defectiveness (blind, deaf, crippled), moral delinquency, mental subnormality; (3) provision of special facilities for the unadjusted—immigrants, dislocated; (4) provision of vocational education where historic agencies of by-education break down; and (5) general, (but only partially responsible) oversight of educational results of all agencies.

- c. Like all other relatively specialized and self-centered institutions, schools tend, unless counteractive force is exerted; (1) to aggrandize functions, and (2) to develop disharmonies with other agencies. Public schools especially manifest these failings. For example: in fields of vernacular speech, moral standards, physical development, household arts, physical development, "sense" training and "manual" training, it is difficult if not impossible to get teachers to "appreciate," much less to "evaluate" and utilize, effects of home, street and vocation education. Hence arise a variety of problems of *coordination*.

7. The effectiveness of family and home education lacks as yet scientific examination. This is the oldest agency; and its contributions are still vital in nurture, vernacular, morals, physical habits, elementary general skills, cultural appreciations, and social evaluations. Educators lightly assume that educational efficacy of home is declining. Manifest failures of coördination exist. Tentative sociological analysis suggests following as examples of problems needing careful examination:

- a. The classification and grading of homes according to their actual present performance of functions now valued educationally. For example: (1) What kinds and how many homes now so provide conditions for children of 4 to 6 as to render kindergarten attendance largely superfluous? (2) What kinds and how many homes now so nourish literary interests of adolescents as to render school efforts largely superfluous? (3) Is not school teaching of "agriculture" to many farm boys largely carrying coals to Newcastle? (4) What kinds and how many homes now train in household arts, as to justify specialized school programs for girls from such homes? (5) What are the kinds and number of homes where English speech is so bad that extensive school efforts toward correct standards should be made from age 4 onward? (6) What are kinds and numbers of homes where supervisory conditions are such that boys (at least) from 9 to 15 should be in school not less than 12 hours daily, and for 300 days yearly (English day parental school)?
- b. Can schools, by moderate stimulation, standard setting, and slight coöperation greatly improve certain varieties of home education? (1) The home is the natural workshop in home-making; why should not schools of household arts and vocational homemaking use it to the full? (2) Adolescent girls com-

pete in decoration and in premature development of characteristics, prized by the "smart set"; mothers individually, helpless against combined efforts of daughters; teachers could coöperate with mothers against prematurity and extravagance.

- c. Many similar problems can be found as to: (1) use of vacations for "beta" types of education; (2) promotion of home culture—reading, music, practical arts; (3) coöperative use of special offerings in moving pictures houses—for example on Friday nights and Saturday afternoons; (4) development of hygienic "practices."

8. The effectiveness of shop "pick up" vocational education offers many openings for constructive effort, greatly facilitated, of course, by compulsory continuation school attendance. "Part-time" schools—for "initial" as well as for "up grading" vocational education—offer large opportunities.

9. Correctional education (of offenders) already shows many attempts at coördination between juvenile prisons, schools, courts, police, and probation service. But ineffectiveness still generally prevails, partly as result of obscure objectives, educational as well as criminological.

10. Play facilities primarily for physical education are often deficient in cities. Many experiments at social provision of these are under way; but here, too, satisfactory specific objectives are largely wanting.

11. Religious denominations of several kinds still insist that religious and secular education must be coördinated in one school if results are to be effective. The entire subject needs examination.

12. Many other problems of coördination of education and specific determination of desirable functions of schools await examination: (a) Can scouting grow on present basis, or is closer affiliation with schools desirable? (b) In what ways shall the potentialities of the photodrama be utilized towards more approved objectives? (c) Should not every school room in poor quarters and in rural districts be a "branch" of the public library (d) (readers add others).

CHAPTER XIII

MECHANISMS OF EDUCATION

A. INSTITUTIONAL

1. Agencies of nurture, by-education, and direct education tend always to develop mechanisms of means, method and administration. These tend towards regimentation or institutionalization, their upholding and furthering coming to be held as ends rather than as means to realization of more real values.

a. Since education is a minor rather than a major function of non-school agencies, their educational mechanisms are less fixed than those of schools. Note how methods of "shop" education have changed from elaborate apprenticeship of the crafts with advent of power driven machinery. Urbanization of population, rationalizing of religion, commercializing of diversions, scientific organization of defence (war) and democratization of courts and police power have greatly modified historic educative mechanisms ancillary to these agencies.

2. Schools, like churches, rest largely on foundations of custom long after science has invaded and given flexibility to mechanical production, medicine, war, agriculture, transportation and distance communication. This is natural since basic sciences of psychology and sociology are so much less developed than physics (for mechanical production and transportation), chemistry, (medicine, agriculture), biology (medicine, agriculture), etc. Apparently scientific procedure will affect study of objectives of education later than administration and methods. Hence still persist many problems:

a. Schools develop *routine* and *customary standards* which subsequent generations accept unintelligently—methods of recitation, size of classes, subjects of study, length of school day, week and year, disciplines, etc. But these routines are often ill-adapted to individuals or special groups.

b. Supporters of established routines oppose with the pertinacity of all the faithful (in the sociological sense) rival types of learning. (Note battles of vernaculars with literary classics, of science with the classics, of vocational education with academic education, and of modern with antique methods in almost every particular field.)

c. But education as a guild or commercial function (private schools, guild schools, church schools, etc.) has usually been more variable than it is likely to be under state control until

governmental agencies develop appreciations and methods of scientific evaluation.

- d. Note development during last century of uniformitarianism (France, Russia, Japan, New York state), compulsory attendance, "standard" sizes of classes and rooms, state or municipal courses of study, centralized text book production, fixed (and sometimes mechanical) grading, mechanical supervision, etc. But note present reactions due to public interest in "the individual" and in more "socialized" schools. Concrete manifestations found in "elective courses" and "subjects," and local experimentation as well as in devotion paid to such catch phrases as "independence of the text book," "adapting education to local needs," "relating education to life of the child," etc.

3. Enlargement of administrative units (from district to town and city, from town to county, from county to state, and now perhaps from state to nation) or "centralization" is inevitably accomplished by mechanizing tendencies, the injurious effects of which can only be counteracted by vigilance and work. Bureaucracies and bureaucratic methods flourish in centralized governmental procedures of every sort (except when the "new broom" temporarily sweeps clean). Civil service, permanent tenure, promotion by seniority, administration by "document," division of responsibility, decision by boards, all contribute to inflexibility, lack of adaptation, extension of influences of "personality."

Nevertheless increasing centralization in all forms of public education is probably inevitable—for sake of expert service, economy of large operations, comprehensive planning. Hence evil effects of "dead" mechanization must be anticipated or sought out and corrected—perhaps by other mechanisms.

B. ADJUSTMENTS OF INDIVIDUALS TO GROUPS

1. Adjustments of the individual to the group relationship are instinctive in only some cases, e.g., pairing of sexes, submission of infant to parents, formation of children's sociability groups (including more durable "gang"), etc. In most cases, adjustment involves conflict of desires and felt interests—individualistic with social, near with remote, concrete with abstract. Processes by which the group absorbs and shapes the individual are described as "social control."

- a. Formulate statements descriptive of current controversies, "state *vs.* individual," "individualistic *vs.* collectivistic," ends of social organization.
- b. Most social groups are longer lived than the individual members. Again, they have a solid corporate character, while individual members come and go. They evolve customs, creeds, formularies, codes, initiations, penalties,—and extensive mechanism to lure and hold the individual. (Illustration from experience.)

- c. Devices of social control utilize, amongst other means: (a) the social and coöperating instincts of the individual (and his dislike for exclusion, non-recognition); (b) his tendency to imitate or from suggestion to form attitudes, sentiments, valuations; (c) his devotion to his own interests, success of life, personal aggrandizement, dislike of the strange and of the foreigner; (d) his uncritical attitude in face of mass suggestion. (Illustrate from socialization of small children.)
- d. The educational forces employed by the group in adopting new members are in the nature of by-education; but, on occasion, direct education is provided. Illustrate from initiations (Hutton Webster, Sutherland), ceremonial routines, education for communion, schools for citizenship.
- e. Certain characteristics of the individual, more or less beyond his personal control, are often held as prerequisite for specific group membership; e.g., birth, rank, race, art talent, courage in combat, wealth, craft, skill. (Illustrate.)
- f. Means of control exerted on behalf of certain types of groups may be anti-social, that is, divisive of the larger society, e.g., birth standards, sumptuary standards, fostering of inter-group antagonisms, etc. (Give concrete examples.)

2. The individual who fits most readily into a variety of the groups approved at any time, possesses as products of heredity, environmental surroundings, and education a variety of recognizable qualities (habits, attitudes, valuations, appreciations, insights) which, when developed to socially approved degrees, are called virtues. We say of the approved individual that he is sincere, obedient, industrious, adaptable, conscientious, honest, truthful, etc. (List 100 "virtues" and their "disapproved" opposites.) (Define characteristics of the "superior" farmer; minister; unskilled laborer; single woman—age 30-50—of wealth and culture.) (Illustrate different grades or kinds of: "loyalties"; "honesties"; "tolerations"; "altruisms.") (Show how doctrine of "formal discipline" vitiates most current discussion of moral education or character formation.)

- a. Groups formed for one function often exercise others. Or membership of one group may be completely decomposed for exercise of other function. (cf. Giddings, constituent and component societies.) (Illustrate in current life.)
- b. Interlacings of groups and extension of areas within which mutuality of interest and possibilities of coöperation are perceived give us enlarged societies. (cf. Large nations, "Christianity," "Catholicism," "banking interests," "Wagnerites," "golf players," "international socialism," "pan-slavism," "anti-saloon forces.") (Add examples from experience.)
- c. Usually, the individual holds a dual position towards each group of which he is a member: his interests, at least in

a degree and for the time, are apparently impeded by it—his freedom is restricted, his services are chained, assessments are levied, exercise of likings is limited; and, per contra, his interests are promoted through the reinforcement given by the group. (Give concrete illustrations.)

- d. Similarly, different kinds of groups tend to claim exclusive interest and energy of individual. Note contemporary examples of competition for interests and energy of individual; vocation *vs.* home, church, political party, sociability, culture, etc. (Give concrete illustrations.)
- e. Again, small groups tend usually to strengthen at expense of larger groups exercising same function, unless artificially restrained. (cf. Gang *vs.* community; city *vs.* state; province *vs.* nation; family *vs.* community; clique, party, cult, sect *vs.* large cognate groups.) But external pressure, as well as growing internal sense of need, tends to cement small groups into larger groups (cf. examples of nation-making, coalescing of economic groups, federation of worshipping groups, co-operation of cultural and sociability groups).
- f. Examine the thesis that, in the region of civilized and semi-civilized human life, "Darwinian selection" and "survival of the fittest" may be much more a struggle between forms of group organization (their effectiveness in promoting capacity to survive) than among individuals composing the groups. (Ill. from the well ordered state of weak individuals against the poorly ordered one of strong individualists; regulars *vs.* mob, etc. Explain evolution of monogamous family, public administration of defence and law, business corporations, trade unions, hierarchical religious organizations, political party machinery, etc. What are contemporary examples of societies and social forms of organization being "pushed to the wall"?)
- g. Man's "group life" was doubtless once very simple. He is supposed to have evolved from an "animal" (perhaps gregarious) ancestor having no "social inheritance." The numerous changes he has undergone (e.g., upright position, enlargement of brain, hand of development, loss of hair, acquisition of speech, invention of tools, objective conservation of experience, monogamy, prolongation of infancy, specialization of occupations, religious life) have all imposed severe strains upon his biological inheritance which is readjusted slowly.
- h. The "institutions" of the group life of man—those composites of customs, laws, and knowledge, with objective creations (buildings, art products, improvements of land, boundaries, languages) which survive while individuals come and go—serve in large part as the means of studying sociology.

- i. History is a kind of social science, occupied chiefly with the scientific description of the "singular" event, the extensive or detailed fact. It is, therefore, a reservoir of the materials of sociology which is occupied chiefly with the "general," with "causal relationships," and, ultimately, with prediction and control. (Compare "descriptive geography" with physiography,—in its interpretative aspects; surveys of production, mining areas, weather, population—census, migration, etc., respectively, with economics, geology, meteorology and the sociology of population distribution, mobility etc.) (Johnson, H., *The Teaching of History*, 1-28.)

3. Of especial importance to education (as a field of applied science) are those contributions of sociology which explain (a) the character and functioning of the social and of the (apparently) individualistic instincts in man; (b) the varieties of means and methods effective in "social control"; (c) the character of the normal "hierarchical" organization in any form of group life—economic, sociability, religious, political (including defensive), cultural—which gives optimum results (to the individual and to his fellows—his society); (d) the actual significance of the values implicit in the words "democracy," "culture," "freedom," "righteousness," etc.; (e) the survivals of primitive life (in biological inheritance and in social inheritance) which necessarily limit and predetermine, in a degree, education; and (f) the character and scope of those "improvements" in society which are to be achieved chiefly through specified forms of education.

- a. We must look chiefly to psychology, of course, for explanation of the possibilities of, and limitations to, the educability of the individual. But, as regards the qualities of chief significance to the group life (the expansion, modification or repression of the social instincts—sociability, religiosity, conscience, coöperation, honor, anger, sex, conformity, leadership, worship of unseen, etc.; the promotion of acquisitiveness—wealth getting and conserving; development of vocational productiveness; promotion of civic attitudes; etc.) we probably need a special "social psychology."
- b. But "educational sociology" must look chiefly to the front. It is primarily concerned with the definition and comparative evaluation of a long series of educational goals which are so concrete and practicable that each can be made the conscious objective of educational effort, and which, at the same time, are so closely and integrally related to the various highest "goods" that we can now conceive (in relation to realities, not "castles in Spain"), that there shall not be excessive misdirection or waste of effort in realizing them.

C. PROBLEMS FOR STUDY

1. Supply from experience realistic "case" materials to illustrate each of the following:

- a. The processes by which, at twenty years of age, a youth has been assimilated to his family's standards of language, manners, religious views, social standards.
- b. The conditions under which man at maturity has "grown away from" his family's desires and standards of morals, religion, politics.
- c. The processes by which a man who at thirty is a devout Methodist has probably reached that stage.
- d. H. B. at fifty-five is a rich, powerful and aggressive railway president. He has a style-loving family, is a member of an aristocratic city church, and an active member of several clubs. His boyhood was spent on a small farm where the economic struggles of his parents were severe. What have been probably strongest "socializing" influences in his life to date?
- e. The processes which make a Vermont boy probably a "good" Republican, and a similar South Carolina boy a "good" Democrat.
- f. The processes by which the daughter of a prosperous, urban dwelling New England family of "old stock" becomes at forty a "lady" of characteristic physique, ideals, and habits.
- g. The process by which young immigrant finally becomes a "good" American.

2. Give instances where groupings formed for vocational, political reform, or other purposes, have gradually substituted sociability and other functions, e.g., Masons, the "Ancient and Honorable Artillery," clubs, cultural associations.

3. Describe the mechanisms now necessary to the operation of: the Republican party, the Red Cross, the Catholic church, the American Federation of Labor, The Rochdale Coöperative Societies, and the Daughters of the Revolution.

4. Give from experience realistic "case" materials to illustrate:

- a. Difficulties encountered by a man in giving expected time and energy respectively to his family, vocation, church, political party, clubs, community associates (sociability), cultural associations, and to himself for health, meditation, rest.
- b. Conflict of demands on prosperous and intelligent woman of family, church, civic associates, cultural associates, etc.
- c. Tendency of individuals to give of themselves excessively to one type of group activity.

d. Difficulties of separating young people from primitive groupings and of allying them to more important adult groupings.

5. Two large nations confront each other with such opposed interests that war always threatens. Discuss probable effects in each nation on: centralization of government; subordination of religious strife; administration of justice; expenditures for education; promotion of public sanitation; development of individual initiative; appearance and activity of radical political parties.

6. Is it probable that in the North Temperate Zone the following have had survival values of importance; and if so, in what probable forms of success in war, economic production, eugenic fertility, sustaining of general health, increase of useful knowledge, maintenance of justice, etc.; monogamy, monotheistic worship, subjection of women, hereditary aristocracy and rulership, democracy, slavery, separation of church and state, public support of education, fine art, private property, written constitutions, public promotion of scientific research.

7. Discuss the "scope" of publicly supported education, as found, e.g., in a Western State in the United States, in promoting such "social values" as health, morals, justice, wealth, security, beauty in life, knowledge, sociability, etc.

8. Hence deduce for preliminary consideration, schemes of "aims of education" desirable on behalf of:

- a. The "scientifically talented" (in several species).
- b. The artistically talented (in several species).
- c. The very strong of body and average of mind.
- d. The very sociable.
- e. The innately or early biassed criminal or vicious.
- f. The moron.
- g. The intelligent of feeble bodies.

REFERENCES: Bagehot, Boaz, Breckenridge, Cannon, Carver, Churchill, Wells (1), Cooley (2), Coolidge, Davenport (2), Devine, Dugdale, Giddings, Huntington (1), Keller, King, Kropotkin, McDougall, Mercier, Morris, Oppenheimer, Parmelee, Nietzsche, Putnam, Reid, Riis (1), Ross (1), Smith (2), Wells (1).

CHAPTER XIV

CONSTRUCTION OF CURRICULA

A. SOCIOLOGICAL APPLICATIONS

Among other purposes, the methods and results of educational sociology may be applied to:

1. The determination, in any particular case, of the respective actual or possible contributions towards approved ends of development and education of: heredity; material environment; social environment (agencies of by-education); and direct education.

a. For example, oral communication. By inheritance, the child derives vocal organs, aural organs, nervous mechanisms required. (Note cases of defective heredity.) Material environment gives few special effects. By-education gives definite forms of speech—English or French, grammatical or the reverse, dialect or pure pronunciation. By-education exerted by many agencies besides home. School functions in: (*a*) correcting defects due to bad by-education in vernacular; (*b*) giving pupils new levels of attainment (voice culture, oratory, sentence structure, business voice, etc.); and in teaching foreign language.

b. Provide parallel illustrations for: (*a*) written communication; (*b*) religious creeds; (*c*) vocational competency (e.g., dentist, sailor, bank president, piano playing); (*d*) love of poetry; (*e*) mathematical powers; (*f*) scientific inquiry.

2. The evaluation of the contributions of natural inheritance towards individual powers, as a basis of determining actual and possible contributions of direct education.

a. What is desirable scope and character of direct education for persons born: (*a*) blind? (*b*) measurably below the average in general mental ability (moron)? (*c*) with a clear genius for singing? (*d*) with exceptional capacity for abstract mathematics?

b. What are possible vocational guidance tests? Educational guidance tests?

c. What bearings on educational programs should result from knowledge that certain individuals are by heredity: (*a*) predisposed to tuberculosis? (*b*) of ancestry with long record

for viciousness and immorality? (c) predisposed to expression in plastic arts?

3. The evaluation of contributions towards optimum development and education of results of agencies of by-education.

- a. What are normal contributions of specified types of homes to (a) general knowledge? (b) body postures? (c) dietetic habits and tastes? (d) appreciation of plastic arts? (e) vocabularies, ages 12 to 14? (f) ideals of honesty? (g) habits of honest practice? (h) vocational homemaking competency for girls? (i) vocational competency for farm boys?
- b. What are contributions of normal play in hilly rural region for boys 12-14 (or other specified age or sex) to: (a) general muscular development? (b) various habits of initiative, self-reliance, etc.? (c) sex continence? (d) nature knowledge?
- c. What are contributions as by-education of wage-earning employment of: (a) girls, 16-20, in well-managed department store, as regards: morals? health? experience capable of functioning later in homemaking? useful general intelligence? (b) boys, in telegraph messenger service? (c) girls, as helpers or workers in textile factory?
- d. What are valuable contributions (or reverse) towards (specified classes) of church worship? Shakespearean plays? modern dramas? moving pictures? free public library reading? the afternoon newspapers?

4. The evaluation of actual or possible contributions of specialized forms of agencies of direct education.

- a. Describe twenty different types of schools and alleged aims of each.

B. DEFINITIONS

1. General definitions. The offerings of subjects, courses, supervised activities, etc., made by a school on behalf of a designated group of learners will be called a *curriculum*. A strand or element of the curriculum consisting of organized materials of instruction, etc., here called *subject*. A stated portion of a subject is called a *course*. The subjects (or for a stated period, courses) taken by an individual student is designated *student's program*.

- a. Examples of curricula: kindergarten; elementary school (first six grades); junior high school industrial arts; junior high school modern language; high school college preparatory; high school general; high school general for first two years; high school technical; high school commercial; blind children 12-16; morons 12-25; illiterate negroes 18-25; day industrial school, machinists; day industrial school, printers; day industrial school, weavers; day commercial school, stenographers; day commercial school, salesgirls; agricultural school, gardeners; agricultural school, poultrymen; homemaking day school, girls

14-17; homemaking day school, girls 20-24; evening extension vocational school, stenographers; short-course day extension agricultural school, gardeners; elementary school teaching; high school teaching, modern language; agricultural school teaching; school nursing; medical; blind school teaching; university extension (cultural), etc.

- b. Examples of subjects; kindergarten stories, primary reading (mechanics); elementary school playground; junior high school French; junior high school scouting; senior high school general science; stenographers' English language; carpenters' drawing; gardeners' soils; college (liberal) government; etc.
- c. Examples of courses: first grade nature study; eighth grade oral reading; eleventh grade physics; first year college algebra; adult illiterates, beginners' reading; etc.
- d. A curriculum ordinarily consists of the offerings (with alternatives) designed for a group of students exhibiting modal capacities, interests, prospective needs. If curriculum is prescriptive in detail for all, then curriculum and students' program are identical. But ordinarily individual students over twelve years of age will be given alternative subjects (and courses) within one curriculum; and, where school offers two or more curricula, students may be permitted to make program (of studies or courses) from several curricula.
- e. Note abandonment of: classical course, commercial course, etc.

2. "Teaching unit" will be employed to designate portion of offering whereby particular objective is to be accomplished. This objective may be simply one step or stage towards larger objective. Ordinarily, a "curriculum" is largest unit; a "course" is a "long unit"; while a course may be broken into "short units," such as lessons, exercises, experiments, problems, projects, topics, cases, readings, conferences, recitations, reports, quizzes, inquiries, essays, activities, etc.

- a. The need of sound pedagogical organization of long as well as short units as a condition of effective school work should be apparent. Much confusion exists here now. Ordinarily, for younger learners: (a) the ultimate objectives of curricula and courses must be taken on faith; but (b) the proximate objectives of short units should be clearly felt and comprehended.
- b. In alpha courses (work, instructing and training towards pre-established goals) definite organization of pedagogical units necessary. In beta (play, developmental) activities organization units should not be artificial, to interfere with desirable spontaneity; but here also, definite organization of units and equally definite organization of means of flexibility, desirable. (cf. *Handbook of Scouting*, *Children's Book of Knowledge*,

Popular Science, Popular Mechanics, Young People's Guides to Reading, etc., for good examples.)

- c. What are probabilities that most teaching units are now unsound? Query as to: length; integration with best learning capacities; integral character as regards approaches, concentration, proliferation, application; objectivity of resulting achievement.
 - d. Probability that "correlation" can be achieved only within short teaching unit. Correlation of *subjects* (or courses) not practicable (except by creating new subject out of two or more previously independent). But within short unit possible to have major specific objective, and minors from other fields (e.g., learning to use camera, application of knowledge of optics; writing essay, use of spelling, etc.).
 - c. Lessons, exercises, experiments, recitations, well understood units. "Problem" understood in mathematics; imperfectly elsewhere; a valuable unit for "thinking" activities. "Project" designates activity chiefly concerned with visible concrete achievement (and may be classified as "school execution"; "home execution"; "observation and report"; etc.). "Case" designates larger unit of individual investigation, report, etc. "Reading" self-explanatory.
 - f. Determine, hypothetically, suitable units for boys, 12-16, in physical development; rifle shooting; towards useful adult forms of honesty, truthfulness, initiative; correction of defects of speech; towards good writing (composition); right ideals of citizenship in local affairs; utilization of good in contemporary literature; humane treatment of animals; development of "mechanical" interests; development of musical appreciation; development of power of sustained oral presentation of ideas to audience; mastery of reading French; mastery of important stages of machinist's trade.
3. Distinction between vocational and "liberal" objectives.
- a. Note that popular usage always clearly recognizes vocational competency in men and women 20-50, but without discriminating or evaluating sources—heredity, environment, by-education, direct education.
 - b. Popular usage also recognizes results of "liberal" education. "Cultivated," "well informed," "urbane," "possessed of broad vision," "tolerant," are some approved characterizations.
 - c. First positive measure of vocational power is ability to produce exchangeable goods or service—goods or service for which other producers are willing to exchange their goods and service.

- d. Second positive measure: to continue as effective producer over long series of years.
 - e. Third positive measure: ability to adjust—advance, shift, regress—in productive ability as circumstances warrant—youth to prime, prime to old age, follower to leader, routine to executive, “generalist” to specialist.
 - f. Fourth positive measure: ability to render in and through vocation, civic service—service not compensated for in command over exchangeable goods. (Certain forms of professional service, superior and conscientious grades of workmanship, fidelities and other qualities in work beyond those “nominated in the bond.”) (Note that military service—except full-time specialist—civic service, family service—except specialist—and general contributions to social order and progress are not here linked with vocation; these are “civic service.”)
 - g. First negative measure of vocational power; ability to maintain health and strength against (and sometimes through) pressures and specializations of vocation.
 - h. Second negative measure: ability so to adjust and control productive efforts as to insure development and conservation of optimum cultured personality.
 - i. Third negative measure: ability so to adjust and control productive work as to insure optimum discharge of civic and family social obligations.
4. “Power” will be used to designate in general abilities to perform useful work, profitable execution. “Power” in penmanship, spelling, reading French, using trigonometry in engineering, setting type, draughtsmanship, teaching primary school, etc., denotes abilities to execute results, in accordance with certain standards accepted by society.
5. “Capacities” will be used to denote ability to “receive,” to appreciate, to assimilate. Capacity in literature, art, play, hygiene, history, etc., thus designates in each case appreciation of some estimated or evaluated degree.
6. Ultimate values of “liberal” or “general” education are conceived as:
- (a) development of natural powers and capacities in approved directions by simple provision of suitable environment and stimulation; and
 - (b) artificially controlled promotion of capacities for appreciation, and execution along non-vocational lines. (Illustrate from specific food habits, play, competitions, tastes, interests, moral standards, sentiments, attitudes, capacities.)
- a. Indicate popular tests of liberal education.

C. INDIVIDUAL PROGRAMS OF STUDY

1. Offerings of all schools tend to increase, thus giving problems of election of subjects and courses in framing individual programs—for year or longer period.

- a. Note tendency of older colleges and secondary schools to permit election among curricula (often called "courses") each relatively rigid. Analyse theory of "compulsory concentration and dispersion" of studies.
- b. Review arguments for fixed curricula. "Elements of knowledge," "five windows of the soul," "fundamentals of the social inheritance," "culture of the educated man."
- c. Review history of "the elective system" in school and college. Supposed advantages and disadvantages. "Of less importance what one studies than how one studies."
- d. Contrast possibilities of election in vocational and in liberal education.

2. Principles to be employed in guidance of election among educational offerings not yet established. Following proposals are hypothetical:

- a. During period of compulsory attendance school should define and require in substantial measure those forms of instruction and training (especially of alpha types) that, in some cases neutralizing differences, and in some cases compensating for deficiencies, of by-education, will promote group homogeneity. (Illustrate from speech, written language, general science, history, social science, hygiene, geography, inter-racial and international knowledge, art appreciation, utilities appreciation, etc.)
- b. During voluntary school attendance (post-compulsory period) it is to be assumed that all working time of learner is profitably employed; hence that residue for school (full-time or part-time by approved arrangement) is profitably employed; but where choice of offerings is sought by learner, burden of proof rests on school to establish reasons for refusing learner choice in any case, where administrative conditions permit.
- c. Where certificate or diploma attesting completion of requirements for attainment of goal of pre-established significance and worth—"elements of first six grades," "mastery of modern language," "pre-vocational subject," "two-year general high school," "stenographers' vocational," etc., then the necessary elements should be prescribed.
- d. The right of the state to good citizenship, vocational powers, powers of national defence, etc., paramount. Hence when for specified groups, probable attainments in these directions are matters of demonstration, right of prescription acknowledged. But, except for compulsory attendance, compulsory minimum

standards of scholarship, and military training, no standards of worth now demonstrated in proposed prescription—in secondary education—of, e.g., English language, mathematics, foreign language, etc.

- e. A minimum knowledge of English language, English literature, history, geography, etc., having been approved as desirable for normal citizenship, deficiencies therein might well be made a basis for prescribed studies as condition of continuance in higher schools—equivalent to familiar practice of "working off conditions."

3. Problems of framing curricula and programs.

- a. As basis for initial discussion, assume: (a) large, rich, prosperous schools open to pupils 14 to 18 years of age; (b) school offerings measured on basis of total number of clock hours ordinarily required by normal pupils; (c) school year of 200 days of eight clock hours each (8 to 12 and 1 to 5) to embrace all assigned study, sufficient physical play, or work for health purposes, etc.; (d) that, unless otherwise specified, all studies and activities are non-vocational and are chosen for contributions to personal culture, physical development, and enlightened citizenship.
- b. List all possible offerings for a given age group (4 to 6; 6 to 12; 12 to 14; 14 to 16; 16 to 18, etc.) with assumed desirable quantitative allowances for each. Then make curricula for (designated) types of schools, e.g., rural school of eight grades (ages 6-14); rural school of four grades (ages 6-10); poorly equipped urban school, with teacher for each grade; richly equipped urban school, teacher having all work one grade (except industrial and household arts, age 12-14); richly equipped kindergarten in city; small junior high school (100 pupils, ages 12-14); rich junior high school on 6-3-3 basis; rich and large high school offering liberal education, ages 14-16; and various types of vocational schools.
- c. Formulate principles and conditions to govern in the making of individual programs.

CHAPTER XV

OBJECTIVES IN DEVELOPMENTAL CONTROL OF CHILDREN, AGES ONE TO FOUR

1. Children under four develop in powers and acquire social inheritance in large measure if only means of nurture and by-education are suitable. For children normally envired, no direct *schooling* is deemed necessary.

- a. Note increasing insistence on child's receiving a "fair start" in heredity and in prenatal care of mother. Examples of eugenic proposals and of mother care. Problem of the illegitimate; of wage-earning mother.
- b. Problems of determining normal nurtural environment as to: food nurture; shelter; clothing; ventilation; cleanliness; sleep; physical exercise; facilities for play; facilities for association.
- c. What are normal standards of by-education for: speech; body movement; moral behavior; sociability (with mother; father; older sisters and brothers; babies; neighbors of equal age); manners; habits of inhibition; general knowledge; games, plays; intellectual nurture (stories, information); work.
- d. Possibilities of "hot-house" forcing. Probable reasons for; against. Fields for experimentation.
- e. Possibilities of using "play" activities without strain to achieve useful ends in civilized society. Typewriting machines as useful plaything. Early training to read. Mastery of a foreign language. Acquisition of useful knowledge instead of fables. Correct vernacular. Simple useful arts (gardening, cooking) as part of play.
- f. Review of proposals of Montessori.
- g. Problems of day nurseries to offset deficiencies in nurture and by-education caused by wage-earning of mothers. Review of practices. Ideals for public action? Provision of widows' pensions.
- h. Theories as to community coöperation in care of children under four.
- i. Park kindergartens.
- j. Problems of providing for orphaned children.
- k. Problem of state or other socially corporate assistance, correction, or direction of nurture and by-education. Examples of present control of health, economic conditions, housing, milk supply, cruelty and neglect.

CHAPTER XVI

OBJECTIVES OF EDUCATION AND DEVELOPMENT OF CHILDREN, AGES FOUR TO SIX

1. Public school system historically made few attempts at education of children under six to eight years of age. Kindergarten and other analogous agencies recent developments.

a. Apparently two unlike ideals operative:

(a) Protection and furtherance of development of children of poor environment and provision of facilities for by-education; and

(b) Provision of special forms of positive education for children normally circumstanced.

b. Compare crèche (France), day nursery, infant school (England), and certain stages of dame school.

2. Problems of social need of schools or other public agencies in education and development of children 4 to 6 still important. What functions here does society need? Does kindergarten organization and program meet them?

a. What evidence that substantial good can be accomplished for children in approximately normal environment by supplemental efforts of a school?

b. Answer depends upon social value of stimulated or directed (deviated from, or intensified "natural") development.

c. Probable need of assistance in development for children imperfectly environed. Agency meeting this need should (a) possess standards of normal environment; and (b) in case of particular groups determine existing deficiencies.

d. For example, basing deductions in part upon ancestral conditions to which young have for ages conformed and in which they developed; and in part upon observations of children's present development, we can assume the following elements, in degrees to be determined, essential to growth:

(1) Food; (2) rest and sleep; (3) shelter—housing and clothing for rest and play; (4) facilities for physical play—ground space, sunshine, steep, sand, grass, running water, trees, hiding places, portable objects, toys, domestic animals, older companions, younger companions, equal age

companions; (5) facilities for intellectual play and growth, tellers of stories, singers of songs, satisfiers of curiosity; (6) facilities for social play and growth, comforters, lullaby-singers, protectors, leaders, playmates, chums; (7) teachers—in by-education of manners, etc.; (8) agencies for protection of health, insurance of hygienic surroundings, etc.

- e. To what extent does kindergarten now compensate for deficiencies in particular elements indicated above? How far should it? How could it?
- f. What changes of organization would be necessary to make kindergarten an agency of compensatory function? Allocation to: rich communities? poor city communities? poor rural communities? special type of families?
- g. Review above in light of contemporary demands of society for guarantees of "a more protected childhood and a better start in life."
- h. Analyze other possible approaches, e.g., improvement of home and (by some social effort) freeing mother to be more truly caretaker and educator of children.
- i. Special problem of wage-earning mother.
- j. Special problem of immigrant mother unassimilated to American speech and standards of living.
- k. Special problems of defective and dependents: (a) blind; (b) deaf; (c) morons; (d) cripples; (e) orphaned.
- l. Possible functions of school or community nurse; of extension classes for mothers.

A. CERTAIN FUNDAMENTAL SOCIOLOGICAL FACTS

1. Society has made few attempts to establish schools to teach children of 4 to 6 the subjects—reading, writing, numbers, catechism—for which primary schools exist.

2. Children from 4 to 6, as in the case of children still younger, depend on the home for the chief conditions of nurture, physical, moral, cultural. (Give instances in: language, bodily growth, physical habits, dressing habits, moral behavior and manners, towards equal age companions, towards elders, towards animals—play activities, likings for music, story interests.) Environment adjacent to home contributes something (bad or good) and much in case of neglected children.

3. Aims of kindergarten have been variously stated. Sometimes it seems designed to offer forms or extensions of education that no home could normally give; at others to compensate for manifest deficiencies in home environment. Philanthropists establish kindergartens first in slums; but the state often provides them for prosperous communities first.

4. School authorities seem uncertain as yet relative to aims of kindergartens, hence support is irregular. More definite information is needed as to desirable aim, optimum school hours, years, school equipment, training of teachers, probable cost, etc.

B. WORKING CASES FOR STUDY

Case A. In a certain suburban community are 200 children, ages 4-6, living in homes where family standards of living range from \$3000-\$5000. Homes are spacious, healthful; grounds abundant, very well suited to physical play; streets are quiet, attractive, safe. These children visit and play together freely, normally. Mothers coöperate sensibly in play supervision. Children are well nourished and well looked after in physical matters generally. Parents use good English, read, play music, sing, and tell stories to children generously. Children's parties are frequent. Three to five children ranging from one to fifteen years are found in each family. Families go to pleasant country environment for three months each summer.

Case B. In a certain crowded tenement district are 200 children aged 4-6. Homes very small, 2-5 rooms with no central heat, for average family of 4-6 children. No playgrounds except traffic crowded streets, occasionally a vacant lot (generally preempted by large boys) and tenement halls and stairways. Mothers do not "work out," but are very busy and can give little "cultural" attention to children. Fathers away from home long hours, wage earners on fair wages, supply sufficient food, but many of the children have unsatisfactory eating habits. Children subject to communicable diseases and are ill taught or supervised at home as regards wet feet, sleep, rest hours, regular eating, etc. Children play vigorously in their somewhat dangerous environment. Many form bad moral habits, profanity, obscene language and conduct, petty theft, bullying, ostracism of the timid, quarreling. Mothers have no systematized coöperation. Families do not "go away" in summer.

Case C. In a certain rural community are twenty children ages 4-6, living within easy walking or transportation distance of each other. Each home is built on a small farm generously supplied with yard space, trees, outbuildings, barns, domestic animals, running water in brooks, steep slopes, and other natural facilities for safe play. Each child can easily get one or two playmates. Children are well nourished. Mothers know little about hygiene, are hard worked, and slightly capable of stimulating intellectual and aesthetic play. Fathers take only slight part in home life. No change of environment in summer. Children freely associate with older brothers and sisters and "hired men." Each home has talking machine and good selection of records.

Case D. Children of city dwelling (widowed "outworking" mother). (Students will supply details for typical cases.)

Case E. "Only child" in rich urban home (\$5000 standard, up) work done by servants, etc. (Students will supply details of typical cases.)

Cases F to M. (To be supplied by students.)

C. PROBLEMS FOR STUDY

1. Assuming that in all these cases the children will be required to attend school until at least 14 years of age, is it desirable, that public funds be provided to maintain schools for groups under Case A? Why?

2. Similar questions for one of Cases B to M.

3. Is it to be assumed that a school for groups under Case A will primarily aim to compensate for deficiencies in development and by-education of environment? Or, primarily to give direct education that the homes cannot give? Specify particular objectives for each answer.

4. Similar questions for one of Cases P to M.

5. What are possible, practicable, and desirable objectives of physical education in schools for groups under Case A? Specify as to: health oversight, instruction in hygiene, training in physical training, hygienic practices, enlargement of play interests and opportunities, reaction on home oversights and practice, etc. To realize these objectives how much school time—how many hours daily, for how many days in week, for how many weeks in year (including summer) should be required? Indicate principal devices of administration and method. Estimated annual cost per individual?

6. Similar questions for one of Cases B to M.

7. What are possible, practicable and desirable objectives of cultural education (intellectual and aesthetic) in schools under Case A. Specify as to: stories, music, nature study, plastic art, dancing, pictures, craft or hand construction, "mental training," dressing, standards of utilization, better English, etc. What time should be required to realize these objectives? Indicate principal devices of administration and method. Estimated annual cost per individual.

8. Similar questions for one of Cases B to M.

9. What are possible, practicable and desirable objectives of social (moral and civic) education in schools for groups under Case A? Specify as to: provision of special facilities for social play, coöperative enterprise, formation of moral habits, establishment of moral ideals, imparting of civic knowledge, etc. Indicate principal devices of method and administration. Time required to realize these objectives. Estimated cost.

10. Similar questions for one of Cases B to M.

11. Analyze pros and cons of contention that: "No public or private school is needed for children under Case A; they will get the best possible start in life from their present environment." They would certainly lose rather than gain from the cramping conditions of an English infant school, or old-fashioned kindergarten, and they have no need for the modern kindergarten.

12. Analyze pros and cons for contention that: "For children under

Case B it is best that an open air school be provided in park not too remote to which children shall be taken in company assembled by custodians (or "teachers") at their homes and conveyed through streets; that hours should be from 8 to 11:30 and 2 to 5 daily except Sundays and when weather is prohibitive (under what conditions would weather be called prohibitive?) and including summer months; that chief attention would be given to providing conditions for physical play and training in hygiene; and that the whole should be under public support."

13. "In crowded cities it is more important that kindergartens should be in session during July and August than during April and May." Comment.

14. "It is more important that children from 2 to 5 should be in kindergarten than children from 4 to 6 (in crowded poor areas)." Comment.

15. Could we defend the systematic teaching of reading or number in kindergartens?

16. Students formulate other theses for consideration.

D. FURTHER PROBLEMS

1. A given tenement area of city is inhabited by one thousand families of working men of many nationalities; none of the mothers work for wages. The conditions of the children (let us confine ourselves to those between four and six years of age) as to food, clothing and shelter are not bad. But the children have only streets and hallways for play grounds, where conditions are rough and dangerous. The city authorities ask a social economist for recommendations in providing for the one hundred children between four and six in this area. He realizes that the regular kindergarten requires a building equipment and land investment of about \$300 per unit of accommodation and at least \$40 per year per unit for maintenance while it can give at the outside only eight hundred hours of supervision or "contact" or immediate influence to its children out of a waking time for them about at least 4,000 hours.

The social economist (we will assume that no educator would conceive so radical a program) submits the following proposals. There is a park about half a mile away from the remotest part of the district. Four acres of this shall be set apart for the exclusive use of these 120 children between the hours of 8:30 A. M. and 5:30 P. M. This park area is fitted with a few large sand piles, a few grass plots, a few teetering logs, and some simple blocks and other toys. It has 200 feet of smooth pavement for scooters and velocipedes and a bit of steep slope. There are no roofed in spaces, except a small cabin for storage of portable toys, rubbers, etc.

Two "custodians" (we can hardly call them teachers) are to be employed for the 120 children. These custodians are over twenty years of age, physically strong, sympathetic with children, possessed of "poise," and have had special training in "reading of stories." They are expected to work eight hours a day six days in a week, forty-eight weeks per year.

At eight o'clock each morning these "custodians" go through their neighborhood with bell or whistle and gather up their charges, and, like Pied Pipers, lead them to the park. Here toys are taken from the cabin and the flocks turned loose. The custodians seat themselves where they can observe proceedings, perhaps taking their knitting, but holding themselves in readiness to check quarrels before they have proceeded too far. As the spontaneous games fall, perhaps some of the children will want to be "read to." Groups can be formed for this purpose. Conceivably a portable talking machine could be provided, but equipment must be kept simple and easily cared for.

At eleven-thirty the procession would return to their homes for lunch and one hour of prescribed "lying down" during which the custodians are free. At one-thirty or two the above program is repeated, children remaining in the park until five or later.

In stormy weather the same program would be carried out with these exceptions. All parents who habitually kept their children indoors in stormy weather would do so now. All those who permitted their children to play in wet or cold streets would give their children over to the custodians. Periods at the park would be shortened, naturally, and it would be required that children should be properly attired for wet or cold weather.

Such a "kindergarten" would probably cost, apart from park land investment, about \$20 per year per pupil. Would it be worth it? What does the ordinary kindergarten offer that is worth more? What are the deficiencies in the environments of these children which such a "school" would not meet? Apart from considerations of environment, should these children have sound direct or positive education? What? Why? (It is, of course, assumed that these children will all give full time to school attendance between the ages of six and fourteen.)

2. Miles away from the above section is an area occupied by families all having incomes of from three thousand to five thousand dollars per year. These families live in separate houses with pleasant yards. The streets are clean and safe. Families are small, and children have plenty of room for play within doors. Mothers coöperate in letting children "exchange" play times in each other's houses. Is the kindergarten much needed here? What should be its specific aims? These children all play—endlessly, almost tirelessly. They form their own groups, have their own little ostracisms, imitate mildly (only sometimes) the snobberies of their elders, have fierce individual quarrels, and sometimes vendettas (all of which are surely more or less educative for "real life," are they not, if terminated in due season?). These children have music and form and color harmonies in their surroundings in reasonable degree.

3. Down in a slum area of the city we find a large proportion of wage-earning mothers—handicapped by husbands of low competency or dissipated habits, or perhaps the husband is dead or "gone." When these mothers are away from home—in some cases while the children are sleeping, but

most often during the usual play hours—neighbors sometimes exercise a rough oversight over the four-to-six-year-old children. These children are poorly nourished, poorly protected from weather, and even their sleeping times are irregular and broken.

They are seldom clean and poorly learned in manners and deportment. Of the better intellectual and moral influences of either father or mother (sometimes both) they are usually deprived.

Forgetting for a moment the limitations in the traditions of both kindergarten and day nursery, and remembering that the day of eugenic control and mother's pension is still far off, what program can the social economist provide, at reasonable expense, to "compensate for the deficiencies" of the above environment? Will the kindergarten as we now have it be more than a sop, as are summer outings, Christmas dinners, provided by charity, and the visiting nurse? Would the park kindergarten as proposed above suffice? What should be the hours, equipment, specific activities of the "school" required? What hours and days and weeks should it be open? Who should or could teach in it? What will it cost?

CHAPTER XVII

OBJECTIVES OF SCHOOL EDUCATION, AGES SIX TO NINE

A. FUNDAMENTAL SOCIOLOGICAL PRINCIPLES

1. That one set of objectives (A class, or alpha) are determined chiefly by determinate or specifically ascertained requirements of adult life (needs for utilization being primary, needs for vocation, incidental at this stage);

2. That a second set of objectives (B class or beta) are determined by requirements for present development, outcomes in adult life being real but indeterminable—including physical, social (moral and civic), cultural (intellectual, aesthetic, mental training);

3. That where the non-school environment of the child is reasonably normal, wholesome, and provided with means and incentives for physical play, same age companionship, rest, right hygienic practice, and orderly behavior, the school should only moderately seek to provide for these needs, on grounds that home and natural surroundings minister better than school can to these beta objectives;

4. That where the non-school environment of the child is demonstrably deficient in normal means and incentives for physical, social and cultural growth which school-controlled agencies can supply without unduly lessening responsibilities of home, then the school should provide these;

5. That all normal children will be required to attend school until 14 years of age, and until such time beyond that as may be required to attain the minimum powers (measured in alpha objectives) and general development normally capable of being achieved at 14;

6. That it is impracticable to secure, and undesirable to attempt to secure, any of what is properly called vocational education under the age of 14 (it being clearly recognized that vocational guidance is not vocational education);

7. That it is competent for the state (or society) to prescribe the amount and character of school attendance required in the case of any individual or group of individuals to reach standards of physical, moral, cultural and vocational competency known to be desirable or necessary to the individual or the community.

B. WORKING CASES

Case A. Children of crowded, unsanitary tenement environment; non-English speaking foreign parentage. Mothers do not work away from

home. Compulsory school attendance is enforced until 14. School has generous playground, only one accessible. Parents do not leave homes in summer.

Case B. Children 6-9, rural community, of small mixed prosperous farms, fairly well educated parents. School accessible by walking. Children have numberless facilities for play at home, and groups of three to eight can easily form. They participate in farm chores. Reading matter in homes scarce. No vacation trip; but Sunday trips "to town" are frequent.

Case C. Children 6-9, sanitary suburban environment; well educated prosperous parents; will go through high school. Homes possess ample play area. Children find abundant reading matter in homes. They are assured of two months seaside vacation.

Cases D-I. (Students supply other typical cases, ages 6-9.)

Assume in each case sufficient competent teaching force and facilities properly to secure reasonable results aimed at; children of average ability and sharp distinctions preserved between alpha and beta purposes and methods.

C. PROBLEMS FOR STUDY

1. Determine in detail desirable aims of physical education in each case, indicating responsibilities respectively of regular teacher, school nurse, medical inspector, specialist medical service, playground custodian (where provided). Specify aims in physical training, formation of health habits. Probable time required. Probable per capita cost of service.

2. Determine in detail for each case desirable aims of cultural and social education, distinguishing sharply between alpha and beta types. Place, scope, and specific aims of expected reading (mechanics of oral and silent), spelling, handwriting, arithmetic. Aims and character of instruction and training proposed in literature (all general reading and orally told story), natural science, history, and other social sciences, music, crafts. Probable time required. Estimated kinds and amounts of service needed. Estimated cost.

3. For each case determine optimum length of school day, school week, school year, and estimate per capita cost of alternative proposals, where made. Make assumptions relative to probable disposition in each case of child's non-school time and positive or negative educative value of such use.

4. In each case analyze arguments for and against teaching reading (mechanics) in first and second grades.

5. It is not desirable that either handwriting or the reading of a script should be formally attempted in the first grade. Criticise.

6. "No formal arithmetic should be taught in first and second grade." Criticise.

7. Present schemes of "activities" designed to realize some specific alpha aims for the year.

8. "The school day for Case B should be four hours, either forenoons or afternoons, not to exceed 200 days yearly." Criticise.

9. "The school day for Case A children. Not to exceed eight hours. Hours: 7:30-11:30 and 1:30 to 5:30 and for 300 days in the year." Criticise.

10. "The school day for Case C, should be four hours, either forenoons or afternoons, and should extend to 160 days yearly." Criticise.

11. "From one-fourth to one-third of the school day for Case A children should be given to vigorous physical play on school playgrounds." Criticise.

12. "No 'physical play education' is necessary for children under Cases B and C." Criticise and show in detail what this would involve.

13. "The school should make itself a branch library center for children of Cases A and B." Criticise and show in detail what this would involve.

14. "Schools should be in regular full-time session for Case A children during July and August but alpha work should be discontinued." Criticise.

D. ASSUMPTIONS FOR CURRICULA

As a means of scientific analysis of desirable objectives and curriculums for means and methods, homogeneous social requirements are assumed for each type of case below, and also optimum conditions and means of meeting these case requirements. When acceptable curriculums shall have been devised for these, adjustments and accommodations can be worked out for variant cases, and limited facilities. Assume therefore:

1. City amply able and disposed to provide good working facilities, by present standards, as regards quality of teachers, departmental teachers for playgrounds, manual construction, etc., school buildings, playgrounds, general equipment, include provision, where needed, for vacation schools;

2. All pupils in cases given below are physically and intellectually normal;

3. All pupils at age 6 have had no previous schooling;

4. That time schedules—time of coming to school, leaving school, recesses, play day—for any grade are quite independent of those for any other grade;

5. All time allotments and other specifications below to be hypothetical and tentative, given primarily to exemplify concreteness of principles;

6. That *amount* or *degree* of achievement in alpha subjects is assumed to be that which experience shows can be accomplished by model groups in time given;

7. That time given to alpha subjects *includes* whatever time may be

required to give activity basis or concrete apperceptive experience for such learning.

8. Case A. Five hundred children ages 6 to 9 from fairly prosperous homes (family incomes \$2500-5000); living in separate houses; ample yards; quite safe streets; mothers intelligent in securing rest, nurture, play and ample culture for children; families go to seashore for summer, (two or three months); children always find it easy to form groups of two to ten of nearly their own age for social play and other purposes; no dearth of winter or summer play facilities; good park nearby.

9. Case B. Five hundred children, ages 6-9, from crowded city tenement environment; families poor (\$600-1000 annual income); no playgrounds, except crowded and unsafe streets, hallways, etc; mothers do not "work out," but are very busy and poorly informed as to hygienic habits.

E. PROPOSED CURRICULA, CASE A

1. A class (alpha) objectives, (maximum amount that can be effectively realized by average children in time given—by whatever experiment proves most effective).

Grade I. Mechanics of Oral Reading	120	hours
Mechanics of Silent Reading	60	"
Grade II. Mechanics of Oral Reading	30	"
Mechanics of Silent Reading	60	"
Writing	90	"
Script Reading	30	"
Spelling, Capitals, Periods, etc.	60	"
Grade III. Mechanics of Oral Reading	30	"
Mechanics of Silent Reading	60	"
Writing	60	"
Spelling and Composition	30	"
Number	180	"

2. B class (beta) objectives, required.

Grade I. Physical Play	60	"
Hygiene and Training and Instruction	30	"
Manual Construction	60	"
Class Cultural and Civic Activities	30	"
Grade II. Physical Play	60	"
Hygiene	30	"
Manual Construction	60	"
Music, Story, Current Events, Memorial days, etc.	30	"
Grade III. Physical Play	60	"
Hygiene, etc.	30	"
Manual Construction	30	"
Coöperative Culture, Music, Stories, etc.	60	"

3. B class objectives, optional.

Grades I, II, III. Physical Play.....	180	"
Construction	180	"
Cultural and Social Activities.....	180	"

4. Special conditions for Case A.

a. School year, 180 days, no summer school.

b. School day:

Grade I. Required 2 hours daily, 9:30-11:30, optional three hours, 1:30-4:30 or part thereof.

Grade II. Required 2½ hours daily, 9-11:30; optional three hours, 1:30-4:30 or part.

Grade III. Required 3 hours daily, 8:45-11:45; optional 3 hours daily, 1:30-4:30 or part.

c. B class required activities shall be designed primarily and purposefully to supplement and reinforce non-school environmental activities—to give ideals and knowledges of hygiene that homes do not give, to start good games not found locally, to acquaint with simple tools not found in homes, to start readings, etc.

d. Optional B class activities in playground and manual construction to be under special teachers.

F. PROPOSED CURRICULA, CASE B

1. Alpha objectives.

Grade I. Mechanics of Oral Reading.....	120	hours
Mechanics of Silent Reading.....	60	"
Voice Culture, Pronunciation, Accent.....	30	"
Hygiene	30	"
Grade II. Mechanics of Oral Reading.....	30	"
Mechanics of Silent Reading.....	60	"
Writing	90	"
Script Reading.....	30	"
Voice, Speech.....	30	"
Spelling and Composition.....	60	"
Hygiene	60	"
Grade III. Mechanics of Oral Reading.....	30	"
Mechanics of Silent Reading.....	60	"
Writing	60	"
Spelling and Composition	30	"
Numbers	180	"
Voice, Speech.....	60	"
Hygiene	30	"
Morals	30	"

2. Beta objectives required.

Grades I, II, III. Physical Play and Nature Study.....	480	"
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Manual Construction.....	240 hours
Civics and Hygiene.....	120 "
Cultural (Stories, Music, Counting, Pictures)	
Dramatization	120 "

3. Special conditions for Case B.

- a. School year : 240 days.
- b. School day: Grade I, 5 hours, 8-11 and 2-4; Grade II, 5½ hours, 8-11 and 1:30-4; Grade III, 6 hours, 8-11, and 1:30-4:30.
- c. B class activities designated primarily to compensate for deficiencies in extra school environment.
- d. Time allotted to A class work to fall most heavily in cool weather.
- e. Playground and construction activities to be under special teachers.

CHAPTER XVIII

OBJECTIVES OF SCHOOL EDUCATION, NORMALS, AGES NINE TO TWELVE

A. WORKING ASSUMPTIONS

The curriculum problems given below presuppose that with a moderate amount of research and a willingness to abandon traditions crystallized in text books and customs of teachers, we can now:

1. Greatly reduce (possibly by fifty or seventy-five per cent of present offerings) the amounts or extent of "alpha" arithmetic taught. Confining it strictly to adult consumers (utilization) needs, and teaching thoroughly what we undertake.

2. Discover, define and, in a given environment (and even for given individual) assign relative weightings to such alpha English language objectives as pronunciation, correct oral structure usage, correct written structure usage, spelling, punctuation, penmanship, oral reading, silent reading, scope and flexibility of speaking vocabulary, alphabet usage, oral composition (sustained, to audience), written composition, and thereby enable ourselves to devise effective methods of teaching and of testing immediate and remote functionings of our training and instructions.

3. Discover, define and adapt for purposes of effective instruction and training minimum alpha essentials in social geography as well as in world and American history and thereupon experimentally devise methods of teaching and of testing immediate and remote functionings of such training as will give us genuinely effective education in these fields.

4. Discover, define and adapt for purposes of effective instruction and training towards known ends of appreciation, habit, knowledge, and ideal, and adapted to individual needs, specific minimum alpha objectives in hygiene and physical training; and, as a result, devise effective means of teaching and of testing proximate and remote results.

5. Discover and make available a wide range of materials to serve very flexible courses for beta objectives in nature geography and science, social geography, history and science, current events, music, literature, plastic art, constructive or practical arts, physical play, physical development, thrift, oral reading, debating, written composition, and other lines of development along the social and individually wholesome lines of the nature of groups of children or individual children.

B. PROBLEMS NEEDING INVESTIGATION

It is recognized in framing the curriculums below, that our knowledge is very limited and uncertain as to:

1. Whether *physical work* in substantial quantities is essential, in addition to whatever amount of play may be made practicable, to the sound physical development of normal children from 9 to 12 years of age; and if such physical work is essential, how it can be provided by schools in urban environments.

2. What can or should be the specific objectives of moral education in schools for the ages of 9-12, beyond the objectives now realized in keeping the school community wholesome and self-active; and how these further objectives, if they could be concretely defined, either as alpha or beta objectives, could be realized.

3. What can or should be the actual objectives in art appreciation—music, literature, plastic arts—to be realized for these ages; and the means of realizing them.

4. What, beyond the specific objectives implied in the subjects given, are remoter or more general objectives in mental, physical, or moral training or development, practicable to be realized; or the methods of realizing them if they were known and defined.

5. What are the means of preventing teachers of little inventiveness and powers of adaptation from falling into ancient ruts of barren or dwarfing formalism in striving after alpha objectives as defined.

C. CASES AND PROBLEMS

1. Village or urban school conditions; one trained teacher to one-grade class of thirty-five; no departmental teachers (except playground supervision) or departmental rooms; ample equipment and resources; attendance obligatory to 14.

2. Sharp distinctions possible between alpha objectives and beta objectives; and that promotion to 7th grade demands definite mastery of alpha standards in essentials (although retarded at 12 also go to junior schools, where special classes in alpha subjects are available).

3. Typical case groups assumed as follows:

A. Boys and girls from economically low environment (mill workers, many recent immigrants); play facilities, street, small school grounds, few vacant lots; local hygiene and sanitary conditions poor, and moral conditions vulgar and coarse; parents religious but of very ordinary culture; physical conditions of pupils mixed, in general poor; only exceptionally "intellectual" children will probably remain in school beyond 15; most of the boys will become manual wage earners, girls factory hands and 20-24, housewives.

B. Boys and girls of suburban area, prosperous homes, exceptionally high standards of home surroundings, health, morals, family culture; pupils will probably go through high school; majority of boys will enter commercial callings or professions, girls becoming clerical workers, teachers and later housewives.

C-M. (Students supply other realistic but as far as practicable homogeneous cases).

4. Conditions. What length of school day; and what number of school days per year would you consider "optimum" for Class A? Class B? Other classes?

5. What "subjects" should be taught in 4th (or 5th or 6th) grade to Class A? Class B?

6. Arrange for Class A an estimated optimum time distribution schedule for three grades 3 (years) \times 180 (days) \times 5 (hours)—or of 2700 hours divided among the 14 subjects (or more, if provided) given below.

7. Same for Class B.

8. Same for other classes.

9. Divide subjects below into alpha and beta elements, for each grade, showing relative weights by time allotments; as you would have them for Class A. Same for Class B. For other classes.

10. Define some objectives of elementary education not explicitly revealed in these "subjects"; what are their known worths for different classes of pupils; and by what means to be realized. Include: maintenance of health; moral improvement; learning physical properties of "things"; learning coöperation, mutual helpfulness, fair play, truthfulness, thrift; learning self-reliance and responsibility.

11. Provide analysis of a detailed series of social games, constructive projects or other activities; show in each what expected valuable results might accrue towards (a) objectives not explicit in the above list of subjects; (b) objectives analyzed from the beta phases of these subjects; and (c) objectives explicitly derived as alpha phases of these subjects.

12. What are some powers (of execution) and capacities (for appreciation) that can be tested at ends of 4th, 5th, 6th grades respectively? Is it desirable that alpha or beta ends here be standardized—e.g., consumers arithmetic, preferences for songs, practice of good hygiene, pronunciation, basic (alpha) geography?

13. Propose and locate curriculum modifications to utilize school year of 12 months \times 20 days \times 8 hours for A class pupils.

D. CURRICULUM PROPOSALS FOR CASE B (TENTATIVE)

(Assume 240 days \times 8 hours; allotment below in hours to study, recitation, etc; students will supply for Grades V and VI.)

	Grade IV		Grade V		Grade VI	
	Alpha	Beta	Alpha	Beta	Alpha	Beta
Physical training _____	80	—	—	—	—	—
English language oral _____	120	—	—	—	—	—
English language written _____	120	—	—	—	—	—
English literature _____	—	120	—	—	—	—
History and social science _____	60	60	—	—	—	—
Geography _____	60	60	—	—	—	—
Arithmetic _____	160	—	—	—	—	—
Plastic arts _____	—	240	—	—	—	—
Music _____	—	60	—	—	—	—
Practical arts _____	—	240	—	—	—	—
Nature study _____	—	60	—	—	—	—
Hygiene _____	60	60	—	—	—	—
Physical play _____	—	480	—	—	—	—
Moral and civic training _____	60	—	—	—	—	—

CHAPTER XIX

OBJECTIVES OF SCHOOL EDUCATION, NORMALS, AGES TWELVE TO FOURTEEN

A. ASSUMPTIONS OF OPTIMUM WORKING CONDITIONS

1. Assume: central school well equipped with playgrounds, shoprooms, library reading rooms; space for teachers' demonstration garden and five-room demonstration home; sufficient properly qualified teachers to realize reasonable aims; 1,000 pupils "up to grade" and 400 retarded (over 12, but able to do only lower grade alpha subjects); children from varied environments and with varied economic prospects; 180 days yearly attendance, compulsory to 14; opportunities for miscellaneous wage-earning work for boys 14-18 abundant; and for girls 15-18.

2. Assume: certain subjects "prescribed" for all up to specific standards of attainment (unless standard has been met outside); all other subjects "elective," with reservation that pupil may be excluded from an alpha subject if lacking in "good" ability or from a beta, if not interested and coöperative; but each pupil must give specified minimum of time to school, also specified minimums to alpha and to beta offerings; election is aided by careful consultation with parents on basis of pamphlet describing offerings.

3. Assume: school year, four sixty-day quarters, 8 hours each day (3 quarters attendance compulsory to 14); all subjects offered on basis of hour units (to include study, preparation, recitation; hence, 8 units daily, or 480 per quarter); not less than 210 hours per quarter required for alpha and same for beta subjects.

4. Assume: school offerings as below, adapted to grades 7 and 8, progressive from 6th grade where suitable, (special provision for retarded children) (figures on right, hours of study and recitation per year, on quarter basis).

B. JUNIOR SCHOOL OFFERINGS FOR NORMALS

		7th Grade		8th Grade	
		Alpha	Beta	Alpha	Beta
100	English language _____				
101	Oral reading _____	60	—	60	—
102	Silent reading _____	60	—	60	—
103	Voice training _____	60	—	60	—
104	Pronunciation, etc. _____	30	—	30	—
105	Spoken vocabulary building _____	30	—	30	—
106	Oral composition _____	60	—	60	—

		7th Grade		8th Grade	
		Alpha	Beta	Alpha	Beta
107	Correct structure, oral _____	60	—	60	—
108	Spelling _____	60	—	—	—
109	Handwriting _____	60	—	60	—
110	Written composition _____	120	—	120	—
111	Correct structure (applied grammar written) _____	60	—	60	—
112	Alphabet for ready use _____	30	—	30	—
200	Foreign language _____				
201	Oral French _____	180	—	180	—
202	French elementary reading _____	180	—	180	—
203	French grammar and composition _____	180	—	180	—
204	Oral Spanish _____	180	—	180	—
205	Spanish elementary reading _____	180	—	180	—
206	Latin _____	180	—	180	—
301	English literature _____				
301	Miscellaneous, current _____	—	90	—	90
302	Miscellaneous, special field (poetry, biography, home reading, etc.) _____	—	90	—	90
303	Selected classics _____	60	—	60	—
400	Social science _____				
401	Community civics _____	—	90	—	—
402	State and national government _____	—	—	—	90
403	World history, readings (beta phases) _____	—	90	—	90
406	American history, basic facts _____	—	—	60	—
500	Geography _____				
501	Geography, basic facts (alpha phases) _____	90	—	60	—
502	Geography, general readings (beta phases) _____	—	90	—	60
503	Geography (commercial), readings _____	—	—	—	60
504	Geography, methods of finding _____	—	—	—	60
600	Mathematics _____				
601	Consumers mathematics (units beyond first 6 grades) _____	60	—	60	—
602	Algebra (college preparation) _____	180	80	60	—
603	Plane geometry (college preparation) _____	—	—	180	—
604	Household arithmetic (prevocational for girls) _____	90	—	90	—
605	Commercial mathematics _____	90	—	90	—
606	Industrial mathematics _____	90	—	90	—
607	Agricultural mathematics _____	90	—	90	—
608	"Appreciation" readings _____	—	90	—	—

		7th Grade		8th Grade	
		Alpha	Beta	Alpha	Beta
700	Natural science _____				
701	Experimental and observational				
	general science _____	—	60	—	60
702	General science readings _____	—	60	—	60
800	Mental science _____				
801	Mental science readings _____	—	60	—	60
802	"How to study" specific subjects _____	30	—	30	—
900	Art, plastic and graphic _____				
901	Applied art appreciation _____	—	120	—	120
902	Elements of drawing and painting _____	—	60	—	60
903	Moving pictures, appreciation _____	—	30	—	30
904	Applied drawing _____	120	—	120	—
1000	Music _____				
1001	Musical appreciation _____	—	60	—	60
1002	Vocal training _____	90	—	90	—
1003	Instrumental training _____	90	—	90	—
1004	Chorus _____	—	60	—	30
1005	Band _____	—	30	—	60
1100	Practical arts _____				
1101	Industrial arts, miscellaneous _____	—	180	—	180
1102	Household arts, miscellaneous _____	—	180	—	180
1103	Commercial arts, miscellaneous _____	—	180	—	180
1104	Agricultural arts, miscellaneous _____	—	180	—	180
1200	Vocational guidance _____				
1201	Vocational guidance, readings and lectures _____	—	30	—	60
1202	Individual diagnosis _____	10	—	10	—
1300	Physical development and education				
1301	Physical play _____	—	480	—	480
1302	Hygiene reading and lectures _____	—	60	—	60
1303	Hygiene, training _____	60	—	60	—
1304	Corrective physical training _____	60	—	60	—

C. JUNIOR SCHOOL CASES

Case A. Thirty 7th grade boys, average intellectual abilities and interests, strong physical play and social interest, and good industrial arts interests. Are ready for scouting, band, current reading, etc. Fathers wage earners, economic burdens heavy. Have no foreign affiliations. Prognosis: Boys will not remain in school beyond fifteen, but could then be induced by prospects of position to go to short course, all-day vocational specialty school (for juvenile workers) for 30-90 days. Will be wage workers in miscellaneous factories until 25, when a few will become foremen or high grade specialists.

Class B. Thirty 7th grade girls, keen minds, prosperous families, little interest in physical play, intellectually and socially ambitious. Will probably go through high school and college, then miscellaneous social or teaching work until marriage at 26. May be expected to be prominent in social and political life. Will find difficulty in keeping up physical strength in mature years.

Case C. Thirty 7th grade boys from prosperous, cultured homes, fairly good in studies, keen for sports, scouting, etc.; are naturally good speakers and writers. Easily interested in readings, civics, natural sciences, industrial arts. Will probably go through college and into profession or high stage business. Will be influential in politics.

Case D. Thirty girls of poor homes and moderate personal cultivation. Intellectually keen and very ambitious. Families can keep them in school to 18 or even 20, but at much sacrifice. Not well equipped with health and physical strength. Can probably not expect to teach because of alien ancestry. Will probably marry at 26. No household arts interest now.

Cases E to M. (To be supplied by students out of personal experience.)

D. PROBLEMS OF PUPILS

1. Of the above program of school offerings, is it probable that some would be in no demand? Which? Why?
2. Which of these are valueless or for other reasons ought not to be offered at public expense? Why?
3. Which of these offerings ought to be specifically prescribed for all Case A to D pupils alike, irrespective of previous attainments from home surroundings, etc.? Why?
4. Which of these offerings ought to be specifically prescribed for pupils deficient in the attainments usually found at the end of the 6th grade? Why?
5. Which of these offerings would you most strongly advise Case A pupils to elect? Why?
6. Same for Case B pupils.
7. Same for Case C pupils.
8. Same for Case D pupils.
9. Same for other hypothetical cases.
10. Which of these would you most strongly advise Case A pupils not to take? Why?
11. Same for other selected cases.
12. What special offerings supplemental to the above should be offered pupils of 12-14 from two to five grades retarded?
13. In a junior school (manufacturing village) of only 200 pupils, only one-fourth of the above program of studies can be offered. (a) Which units would you retain intact? (b) Which eliminate? (c) Which consolidate?

E. PROBLEMS OF COURSES

1. Having assumed and described a probable group of learners, specify in detail controlling aims, organization and methods for courses: 102; 103; 109; 112; 205; 301; 404; 406; 501; 502; 601; 606; 608; 701; 702; 802; 1001; 1102; 2102; 1301.
2. To what extent is it desirable for the sake of the individual or necessary as a means of class administration that all pupils should do the same work in: 104; 302; 403; 503; 701; 1101; 1301?
3. For what classes, under what conditions, to what extent and by what standards of social worth are the following expected to have value to adults: 101; 102; 107; 201; 405; 501; 602; 1002; 1303?
4. What character of offering would you expect under 103; 204; 608; 802; 1003; 1103; 1202?
5. What specific methods would you propose for: 102; 301; 504; 607; 1004; 1301?

CHAPTER XX

OBJECTIVES OF GENERAL SCHOOL EDUCATION, NORMAL YOUTHS, AGES TWELVE TO EIGHTEEN

1. For this period we assume: compulsory full-time school attendance 12 to 14; optional full-, part-, or no-time attendance 14-18 (with probable right to enforce part-time or continuation school attendance); provision, where practicable, of central schools (maximum walking distance two miles, riding, one hour each way); departmental teaching, flexible curricula, permitting considerable freedom in formation of student programs; and long school day permits reasonable inclusion of "beta" activities.

- a. "Normal" means here inclusion in large modal group—at least 40% on each side of median—of those graded as to mental ability, home influences, fundamental interests, future prospects, etc. Note that "exceptionals" are found "above" as well as "below" normals.
- b. But as regards particular qualities, powers, interests, and prospects, variabilities, always existent, here probably become acute and of real significance in making curricula for schools and, from these, programs for individuals. (Illustrate variations, individual and groupal, as to powers—mathematical, musical, manual dexterities; interests—in abstract studies, in constructive work; prospects—for prolonged schooling, for civic leadership, for entry on professional calling, for advancing cultural appreciations.)

2. Chief contemporary problem of high school curricula is to distinguish between required and elective elements in programs of learners. Range and variety of offerings possible to large, rich schools very great. Following suggested principles applicable to school with ideal equipment (size, facilities, teaching force):

- a. Every pupil shall occupy his entire school time profitably.
- b. Each normal pupil shall give at least 800 hours in 13th year and 900 hours in 14th year to "alpha" studies and activities; and 1,000 hours thereafter for full-time students.
- c. Every pupil electing an alpha study in which failure to complete advanced stages (after suitable "trial" period) invalidates whole (e.g., foreign language, music, English language, special mathematics, plastic art, rifle shooting, a vocation) shall be penalized therefor.

- d. Certain standards of *common* (universal) competency (powers) having been defined as desirable and feasible for normal 12-year-olds, pupils therein deficient shall be required to make up deficiencies (e.g., spelling, penmanship, arithmetic, silent reading, geography power, correct speech, right use of voice). Note that scientific (i.e., objectively measurable, tangibly evaluated) standards here are not yet available, but can be produced with due effort.
 - e. Similarly, if it can be shown that specified forms of power suitable for attainment at ages 12-14 (normal subjects) through school education should be expected of all (common standards), then studies to this end should be prescribed. Note that it is doubtful if one can define these now; our preconceptions (faiths, beliefs) too vague, our evaluation of results of extra-school education and development too incomplete. Even in such fields as English speech, writing, hygiene, arithmetic, drawing, music, geography, history, government, science, our standards now factitious, pedantic, unrelated to life. (In any one of these fields, ascertain: what all-round B class citizen to-day shows; what are his obvious deficiencies—in functioning powers, that is; and what universal prescription can do to help next generation.)
 - f. Guidance (for school education, by-education, and towards vocation) should be fully developed and perhaps some participation therein made obligatory. But criteria for guidance now lacking. E.g., we do not *know* when pupils should be advised to take studies to compensate for inherited deficiencies of power or capacity—music, plastic art, mathematics, practical arts, poetry—and how far culture should be realized along lines of least resistance—i.e., greatest native capacity.
 - g. For purposes of effective teaching and administration, it is desirable that courses in alpha fields or subjects be broken progressively into short and concrete units, each with a clearly indicated objective, expressed in terms of skill, appreciation, knowledge, ideal, etc.
3. Curricula for any given class should rank offerings on basis of probable educational values, placing first those studies that are prescriptive under stated conditions. But note:
- a. There may be specific prescription in general (as spelling, penmanship, in lower grades).
 - b. There may be specific prescription for those electing particular goal—algebra for engineers, advanced spelling for stenographers, Latin for A.B. degree.
 - c. There may be prescription of attendance but not of mastery, e.g., compelling presence at prayers, lectures, concerts, etc., but no testing of attainment.

- d. Quantitative prescription (time, quantity of matter) need not involve specific prescription of matter (literature, songs, field games, science projects—social, natural, mental).
 - e. Minimum standards should be defined for alpha subjects of universal import—then pupils deficient should be required to make up deficiencies.
 - f. Many offerings will be purely elective.
 - g. School and society have right and obligation to require profitable employment of available time.
4. Curricula should make formal recognition of ends or objectives and indicate or refer to means and methods. Note:
- a. Texts, manuals, guides, syllabi are all detailed instruments (plans and specifications) of curricula.
 - b. Large number and variety of specifications and suggestions can be made without prescription—the implication being that the teacher will follow these unless he has equally well defined and evaluated substitutes.
- (a) Discuss: Curriculum specifications as a means of supervision; text as teacher's guide; text as pupil's tool; desirability of writing all texts exclusively for learners and supplementing with teacher's guide (manual).
5. Problem of standards of purpose in alpha subjects and application of tests of proficiency. (Illustration: spelling, penmanship, arithmetic, drawing, modern language, vocation.)

CHAPTER XXI

OBJECTIVES OF LIBERAL SCHOOLS FOR PERSONS, AGES EIGHTEEN TO TWENTY-TWO

1. For this period we assume (a) full-time general or liberal education for limited groups; (b) two years to general education followed by beginnings of professional education for limited groups; (c) need of opportunities for extension work for persons employed; (d) possible requirements of education for military service; (e) special training toward leadership.

2. Note also idealistic proposals that within these years a period should be devoted to state service in lieu of compulsory military service as found in other countries.

3. During these years, for a substantial minority, beginnings should be provided in training for leadership. Note confusion in ordinary use of term, "leader," (a) sometimes used to denote a person holding a well-paid vocation or one that requires much training,—for example, theology, law, medicine, engineering; (b) also used to denote man occupying position in which he has large and obvious following, for example, official in army, captain of vessel, leader of labor union, business manager, superintendent of schools, etc.

a. Note historical fact that professional men have also naturally been looked upon as leaders, a fact less true than formerly for many professions.

4. Problems of training for leadership of second class, those largely of finding persons of superior ability already grounded in lower fields of work or contact and giving the supplemental training. Examples: foreman, overseer, political group leader, social leader, etc.

5. Problems of professional training to-day found more in field of method and aim. Note contemporary movements to make professional training more practical, to measure power of practical achievement as element in granting diplomas.

6. Problems of new professions.

CHAPTER XXII

ADAPTATIONS OF EDUCATION TO SPECIAL SOCIAL CLASSES

Societies, general or special, utilize education as a means of producing desired results of conformity, initiations, etc., in individuals or social groups. Note historical examples.

1. The state, (or philanthropy anticipating), uses school education for a wide range of classes: (a) cultural (bright, average, retarded, illiterate youths, illiterate adults); (b) vocational (leaders, public servants, talented, orphaned, socially needy, crippled, speech defective); (c) anti-social (recidivists, young felons, misdemeanants, youthful delinquents, incorrigible from standpoint of home and school, disciplinary cases, female offenders); racial (colored, conquered territories, immigrants); standard of living (homes, utilization, art), health; thrift; temperance; defenders; immigrant citizens; religious devotees, etc.

a. The fundamental problem here concerns desirable and feasible limits of social custody—direct control under direction of government. How far expedient for state permanently to enter on productive work with blind, recidivists, subnormals, etc. Difficulties involved as regards: economic competition with private enterprise; state as "business man"; restraints on the freedom of individual, etc.

b. Note that custodial care and education have been provided historically for poorer or neglected groups before provision for normal—on assumption of competency of agencies of by-education.

2. Problems of objectives in education of defectives at present grow out of failure to consider that education in terms of its ultimate outcomes. For example.

a. Schools for blind and deaf endeavor to give *kinds* and *scope* of education similar to that for normal children.

b. They neglect supremely important ends of genuine (as against make-believe or sentiment-colored) vocational education.

c. Schools for mental subnormals and cripples do not base their programs upon clear cut differentiation between cases that must remain custodial and those that can be prepared for independent existence.

(a) Investigations: current programs of these schools studied to ascertain actual objectives.

- (b) Problems of the *social* education of defectives, especially mingling with normals.

3. Problems of education of delinquents, especially acute on side of socialization. Uncertainties as to how far anti-social manifestations are the result of heredity, or of bad by-education. Schools now weak in follow-up oversight.

- a. Segregation for education—a desirable means—how far opposed to final socialization?
- b. Difficulty of preventing institutionalizing, of promoting capacity for self-direction, saving, resisting powers, industry.
- c. Partial *vs.* entire custodial oversight—a problem at all stages.
 - (a) Examine institutional reports to determine actual objectives.

4. Problems of providing nurturing environment and by-education for parentless children.

- a. Adoption, "hired homes," institutional custody required, according to circumstances.
- b. Problem of transition to independence.
 - (a) Review history of education of orphans. What has been the special contribution of Christianity?

5. Problems of the social adjustment of immigrants.

- a. Desirability of a national policy. Limitation on private and local effort.
- b. Possibilities of ceremonial adoption into citizenship.
- c. Aims of education: individual efficiency; citizenship; standard of living; personal culture.
 - (a) Formulate detailed problems of education of immigrants for New York.

6. Problems of special education of subject peoples or classes.

- a. Central oversight, and support from local sources.
- b. Special efforts to procure leaders from peoples concerned.
- c. The vocational basis, misunderstood, because of effective by-education in controlling peoples.
- d. Conflict of social ideals in education.
 - (a) What problems remain as regards education of: Negroes; Filipinos; Porto Ricans; Indians; East Indians (for Great Britain)?

7. Extension and differentiation of social needs gives many demands for new types of schools. Efficiency requires that each of these be organized on the basis of clearly defined objectives expressed in curricula and courses.

Vocational education must exist in as many varieties as there are at any given time differentiated vocations—probably over 2,000 now in the United States. Where such education is transferred from "pick up" and apprenticeship methods to schools, these must derive specific objectives from systematic needs of the vocation—for numbers, talents, skills, technical knowledge, vocational perspective.

- a. Schools may be designed to offer either "basic" (whole, complete, integral) or only "extension" (part, fractional) vocational education, according as practical participation or apprenticeship can or cannot give part. Curricula for "extension" training or instruction can be effective only when formulated in clearly understood relationship to the possibilities of contributions from other sources.
- 8. Special education for employed classes may be cultural, physical, vocational, or civic.
 - a. The "Americanization" of mature immigrants may involve several distinct objectives: (a) training in English; (b) instruction and perhaps training in citizenship including history; (c) instruction and training in American sanitary and sumptuary standards—possibly fundamentals of manners also.
 - b. The continuation school with compulsory attendance attempts to preserve and increase culture, physical competency, civic qualities and vocational powers of young persons—under 16 or 18—already vocationally employed. At present curricula for these schools are largely experimental.
 - c. Many men and women develop special cultural or other interests late in life. Philanthropy and volunteer efforts have sporadically sought to provide special facilities for these—through extension courses, admission of workingmen to special college courses, etc. Note attempts at Oxford, in New York City, the agricultural colleges, the American Society for University Extension, social settlements, etc.

MILITARY TRAINING

- 1. Conditions of competition among nations leading to conflict drastically test capacity for coördinated efforts to special ends of military efficiency.
 - a. Note historical enlargement of national areas with probability of federation such as will lessen war.
 - b. Note also steady introduction of science and organization in international conflict with resulting draft upon all forces at sundry periods in past time.
 - c. Analyze significance of James' proposals for moral equivalents of war.
- 2. Problem of the citizen army *vs.* specialized soldiery from standpoint of international efficiency and from standpoint of prolonged intervals of peace between possible conflicts.
 - a. Subsidiary problem of a training officer staff with citizen army. Contrast examples of Switzerland and America.
- 3. Analysis of proposals for universal service in defence, including all forms of special service—for example, food production, transportation, medical, scientific—as well as actual sharing in immediate conflict.

- a. The problem of coordinating military training with training for vocation.
 - b. The problem of keeping alive military competency by use of vocation or other periods for military training.
4. The problem of physical training of youths from 14-18 as foundations for military training.

CHAPTER XXIII

OBJECTIVES OF SPECIAL EDUCATION FOR PHYSICAL DEFECTIVES

1. Physical defectives here include all variants (by heredity or early environment) for whom ordinary educational processes are inadequate—deaf, dumb, blind, cripples, mentally subnormal (of all grades), etc.

a. Note that, at first, classifications here are rough and inclusive of only extreme cases. As diagnosis improves, additional classes are formed, e.g., completely blind, partly blind; morons, imbeciles, etc. (Ex., vocal, aural, skeletal defectives.)

b. Fundamental classification ultimately required: (a) those probably requiring permanent public assistance, release from conditions of individual competitive existence; and (b) those able, after proper start, to "go alone," without state support.

2. Philanthropic effort has pioneered education of defectives. Probable over-development of attempts to make defectives like normals. Under-valuation of vocational education. Absence of evaluation of results in terms of adult life—20-60 years.

a. Philanthropic effort often reflects best spirit of Christian individualism—the valuation of worth of human soul. But like elemental Christian charity, it is often emotional, temporary, unscientific—hence in long run, sometimes even unsocial.

b. Rare cases where physical defectives—more commonly blind, occasionally crippled—have become marked social assets. One Helen Keller leads to extended efforts to give fullest possible development to culture capacities of blind.

3. Complications involved in providing normal family life for defectives probably incapable of meeting conditions of competitive self-support. Public assistance agencies, designed to make them at least self-supporting, needed.

a. For these classes is extended cultural education required—e.g., general reading, art appreciation, etc.?

b. Add specialized vocational education at successive stages—14, 18, 22—designed to make them fully productive in state directed service.

4. For classes for whom independent existence is contemplated, very specialized forms of liberal and vocational education required.

a. Liberal education should consist of (a) special forms of cul-

tural interest and capacity so developed as to give them relief from loneliness and privations which their condition entails; and (b) special forms of social education (including vocational guidance) adapting them to particular social conditions which they must meet.

- b. Obviously, vocational education of a definitely adjusted and specialized character required. Need of survey of possible occupations, for blind, deaf, subnormal, crippled. Lessons from European countries, as consequence of war, now available.

5. Special problems of blind.

- a. Blindness impairs mental powers less than deafness. Hence, given sources of mental stimulation—music, reading, conversation—blind grow readily in cultural appreciations.
- b. But extreme difficulties in teaching studies like geography, science, art, etc. Hence, absurdity of many current attempts at general education.
- c. Difficulties of employing deaf in coöperative work.
- d. Probabilities that majority of blind can be assisted to higher productiveness by state action than otherwise. Analyze possible openings, coöperative and other.

6. Special problems of the deaf.

- a. Serious effects of deafness on development of appreciations, especially abstract thinking.
- b. Conflict of methods of communication.
- c. Difficulties of employing deaf in coöperative work.
- d. Vocations for the deaf.

7. Special problems of the crippled.

- a. Vocations.

8. Special problems of the mentally subnormal (those not ordinarily anti-social).

- a. Classification.
- b. Obstacles to freedom—especially of women under 50 year of age.
- c. Vocations. Note frequently excellent working powers of subnormals, and bearing of work on physical and moral wholesomeness.

9. Speech defectives.

CHAPTER XXIV

OBJECTIVES OF SPECIAL EDUCATION FOR THE BLIND

A. FUNDAMENTAL SOCIOLOGICAL FACTS

1. Birth and accident give society a substantial (but probably diminishing) number of blind. Unless distinctly subnormal mentally, these are expected to be self-supporting in adult life.

2. Methods have been devised whereby the blind can learn reading and writing through use of touch.

3. Philanthropy has first developed the special education required by the blind; but public agencies now supercede private effort.

4. Since special teachers and equipment are required to teach the blind, central boarding schools are needed—except in a few large cities where day school attendance is practicable; hence detachment from home environment is almost necessary during school period.

5. The blind are at least as culturally sensitive and responsive as the seeing; but in most respects they are average people.

6. The outstanding needs of the blind are: special methods of reading and writing; special vocational guidance and preparation (in their cases pick up methods are signally fruitless); and, probably, special cultural equipment as resource in leisure; possibly a fourth need is specially adjusted means of physical recreation.

7. Some social economists believe that in a well organized society all the blind so desiring (and, under compulsion, all blind likely to become dependent) should be the "wards of the state," being brought together for residence and work, under favorable conditions of productive service.

B. WORKING CASES

Case A. Twenty girls, blind from birth, entered at eight years of age in free residence school. Of average mentality, from working class families, and for sake of families, should be self-supporting at close of school—age 18. States provides home, tuition, etc., and exacts, except from poorest parents, fees about equal to support of child at home. School in session ten months, and can use full day and full week for educative purposes.

Case B. Ten men, 20 to 35 years of age, blinded by accident. State will give two years schooling in residence school. Families poor, small

cultural background, equivalent of sixth grade education completed at fourteen. All of mechanical bent.

Cases C to D. Supplied by students.

C. PROBLEMS

1. In Case A, assuming that reading for simple purpose can be taught during first three years, and that then history, language, mathematics and other academic subjects, except geography, sight music, drawing, and practical arts, can be taught as well as to seeing children, what should be objectives from eight to eighteen in these subjects? Assuming that geography, drawing, practical arts, and sight music present extraordinary difficulties, what would be proposed objectives in these?

2. In view of opportunities given by residence school, propose novel or living under ordinary conditions?

7. Assume state ready to give life custody and work to Case A members, with partial self-support starting at 16 but some extension education continuing to 25; what would be educational program proposed; 8 to 16; 16 to 25?

8. What vocations would be proposed for Case B group? How could training be provided? What special forms of cultural and physical education would be suggested?

Summarize experience with blinded soldiers?

9. What generally valid conclusions can probably be inferred from exceptional cases where blind have become successful teachers, farmers, secretaries, etc.

specially adapted set of objectives in respectively: physical development; and education towards (a) corrective training, (b) adult recreation; cultural education for leisure, civic education.

3. What will be vocations open to these girls? What vocations are probably most desirable for them? Should we assume that in these vocations they can compete on equal terms with the seeing, or that they should expect to work for less wages, or that they should bring superior training? What seem to you the respective possibilities of: teaching; typing from dictaphone; needle trades; machine assembly; homemaking (employed); homemaking (married); gardening.

For one of these vocations indicate programs of training (in residence school) with possibilities for part-time work.

4. Under what circumstances should marriage of blind woman and seeing man be encouraged? Of blind man and woman?

5. It is said to be very difficult to teach geography to the blind; what do you conceive to be necessary objectives in that subject?

6. What are forms of physical recreation most suited to blind adults

CHAPTER XXV

OBJECTIVES OF SPECIAL EDUCATION FOR SOCIAL OFFENDERS

1. For present purposes, the category "anti-social" will be used to cover not only persons convicted of felonies and misdemeanors, but also potential delinquents, habitual truants and vagrants and part or wholly confirmed victims of various vices.

2. Social control in large group forms at all stages of social evolution has aimed very consciously at the extirpation, repression, correction and prevention of anti-social individuals and of "small group" organizations of them. Death, expulsion, and drastic punishments have been immemorably employed. Few religions but have ingeniously used spiritual terrors to curb or prevent anti-social manifestations. Systems of law with complicated machinery of police, courts, prisons and other corrective agencies have been evolved. Criminology and relief have an extensive literature showing many extensive applications of sociological knowledge. The increasing complexity of society creates endless new opportunities for development of parasitic, predatory and generally vicious types, necessitates corresponding provision of means of combatting them.

3. Social economists have perennial interest in *sources* of anti-social dispositions, as have physicians in sources of many kinds of disease, because if these are essentially effects of environment rather than heredity, then prevention seems much more feasible and even correction always hopeful. Evidence here is still very obscure and not yet safe guide for individual prognosis, but the following conclusions seem now justifiable.

- a. Great variability exists among individuals as regards the instincts that affect social action. In some, individualistic tendencies towards angry combat, sex lust, property acquisitiveness, vagrancy, idleness, destructiveness and the like are relatively strong as against the instincts that make for restraint and group conformity, such as fears (of future pain, social disapproval, etc.), submissiveness, domesticity, love, as well as their more complex resultants in forms of conscience, loyalty, religiousness, industriousness, etc.
- b. A sufficiently adverse social environment (neglect, absence of good example and control, ignorance, small group contagion,

etc.), given sufficient time in youthful plasticity can probably corrupt even the inherently best, and can certainly spoil persons of only average or inferior right social equipment.

- c. But, no less certainly, a sufficiently propitious social environment, operative over years of plasticity, can at least insure good present virtues of conformity, and often of adult conformity even in the case of those inherently predisposed to anti-social courses. (It should be recognized, however, that the provision of such environment may easily be too costly for a given social group to provide—hence reluctance of couples to adopt infants of doubtful origin, tendencies of primitive peoples and of advanced societies summarily to execute or exile unpromising individuals, etc.)
- d. The primary socializing agency is parental control and it is socially expedient at all times to conserve and even enhance the responsibility of the family, but as a consequence, inferior families are thus permitted to expose children of average or inferior dispositions to prolonged anti-social habituation, before *other agencies can act loco parentis*. Similarly, for the sake of conserving liberty and growth opportunities for the majority, extensive freedom and scope is given, especially under democratic conditions, to play of such agencies as street association, press, stage, photodrama, school discipline, which thus give endless opportunities for the anti-socially inclined to become deeply habituated before influences of special controlling agencies (police power, public opinion, etc.) can become operative. Hence extreme difficulties, both of early diagnosis of potential offenders, and of segregation for special treatment of incipient offenders.
- e. The "reformability," that is for restoration to a responsible place in free society, of social offenders diminishes rapidly with age, with extent of anti-social habituation, and with lowness of general intelligence. A thief, vagrant, prostitute, bully, drunkard, or slacker of more than twenty-five seems usually irredeemable except by extraordinary means. Even a youthful offender at seventeen to twenty may be hopeless if adverse social environment has long been influential. Where "freedom" offers many temptations to the person of low intelligence and normal or strong appetites (easy living conditions for vagrants, laxity towards prostitution and drunkenness, tolerance of physical brutality, absence of compulsory school attendance, slight disapproval of petty thievery and begging, etc.) a large proportion of mental subnormals, especially from families

where parental control stops early, may be expected to embrace paritism and other anti-social practices.

4. Social economy has made great strides in recent years in directing public and official opinion towards prevention and early correction as means of lessening number of offenders.

5. Fundamental classification in all early education based upon character of environment and available by-education. (a) Is the home adequate or capable of being made adequate? or (b) must public (or philanthropic) agencies supply substitutes?

a. Early diagnosis on this basis necessary to determine functions of school education—which is supplemental, if home environment is right, and which must develop new means if it is not.

6. Provisions of substitutes for home influence—in case of broken homes or homes unequal to task—always most difficult problem. Note classification cottages, probation, out-placing, rewards, self-support. Importance of special kinds of personality, and means of making it effective in public provision of means for by-education.

a. Devices used in American school for delinquents; so-called Parental school; English “day” truant school; George Jr. Republic; etc.

b. Problems of avoiding: contamination; mechanization of routine; “institutional dependence”; gang labor; uncompensated labor.

c. Problem of “harbor” for youths placed out.

7. Constructive proposals for:

a. Disciplinary classes in coöperation with normal home.

b. Truant classes in connection with: (a) normal home; and (b) defective, but still useful home.

c. Residence schools for neglected and anti-social children, 10-14.

d. Residence schools for hardened cases, 14 upward, boys.

e. Same, girls.

8. Problems of prison education for adults, (a) reformable and (b) irreclaimable recidivists.

9. Problems of vocational education of delinquents.

CHAPTER XXVI

ENGLISH LANGUAGE

1. Three (possibly four) types of objectives in English language studies: (*a*) speaking; (*b*) reading; (*c*) writing; and, possibly (*d*) hearing. Each has its peculiar techniques. Common elements in speaking and writing, oral reading, etc.

- a.* Clear-cut differentiation of objectives (now wanting in English language teaching in all but lowest grades) will always: (*a*) take account of learner's previous attainments; (*b*) give place to concomitant factors of thought or idea power as related to language appreciation and expression; and (*c*) then develop special and often highly specialized techniques adding new powers or improving existing powers.
- b.* In certain language phases, functions of school peculiarly residual, e.g., speech (including pronunciation, structure usage, vocal powers—all ages; and silent reading—older pupils).
- c.* Sharp differentiation here made between teaching of English language and teaching of English literature. Fundamental objectives surely very wide apart (although actual objectives of literature study not yet determined). Language courses may employ selections and extracts from literature for anatomical and other exercise purposes—but that is not the study of literature.
- d.* English language studies largely of alpha character. Outcomes are or should be definite and measurable powers to be used throughout life in definite and instrumental ways. Some appreciation (beta) offerings may prove desirable—appreciations of good usage in those having extraordinary powers of speaking, reading and writing.

2. Speech or oral expression a division in which by-education is peculiarly potent, leaving school residual functions of, as yet, very imperfectly defined character.

- a.* What are desirable social objectives? Doubtless: (*a*) for the individual—ease, economy and effectiveness of complete expression of ideas in varying situations (with equals, inferiors, superiors); (*b*) for the community—fullness of mutual under-

standing, disappearance of caste or class distinctions; and (c) for the nation—homogeneity of forms (pronunciations, dialects, “accents”) and maximum of expressiveness. Probably also interaction of language and thought as objectives, but psychology in this very obscure.

- b. Oral intercourse is of two fundamentally unlike kinds: (a) conversation, chat, “give and take”; and (b) sustained presentation—reading or speaking to audience. Note that for all ordinary “conversation” between “peers” (equals in intellectual and social ways) results of by-education seem ample. “Education” in speech is chiefly to prepare for communication between those not peers, and for sustained presentation—the last being a difficult goal.
- c. Language structure—“speaking grammatically”—a specific goal at all stages. Probable uselessness of “grammar” study as a basis, at least until age 15. Surveys are needed in each individual case and something like a language “map” prepared for (and perhaps by) each learner showing strong and weak points. Present teaching performances in most schools are frightfully clumsy and ineffective.
- d. Voice training—including pronunciation, enunciation, etc.—also a possible objective at all stages. Poverty of present “alpha” mechanisms. Need of series of specific objectives. Probably harmful effects of present methods of school reading and recitation. State problems as to whether singing provides valuable exercises towards voice training. Do children of non-English speaking parents present special needs? How definable?
- e. Oral reading—in true sense of communication of new matter to listening audience—probably important objective at stages from age ten to twenty as elective for advanced or special cultured purposes. But note that but few vocations impose special demands for oral reading. Probably archaic character of present “oral reading.” Note that “reciting,” “elocution,” “speaking,” “oratory” and drama—all involving oral delivery of memorized text—may be regarded as pedagogical subspecies or variants of oral reading. Should “class” oral reading be discontinued as general requirement after third grade?
- f. Oral composition—sustained oral delivery of ideas for which language structure is improvised as delivery proceeds—a valuable objective for all or at least many of the talented in modern life. Class recitations are examples, and in them approved standards should be maintained. Debating as a valuable means. Need of defining series of specific objectives in teaching oral composition.

- g.* Vocabulary building, including readiness of recall, an undefined problem as yet in oral expression.
 - h.* Grammar, rhetoric, "elocution"—all have possible "units" to offer in "language study" applied to speech, but these not yet well defined.
 - i.* Discuss special problems of oral language training for: (*a*) teachers; (*b*) publicists; (*c*) preachers; (*d*) telephone operators, etc.
3. Reading, as used here, means only "silent" reading. Conditions of civilized society make this an objective of education second in importance only to speech; and because of ineffectiveness of by-education in early years, the first objective of all lower schools.
- a.* Note desirability of devising means of teaching silent reading without the boring and probably harmful means of "oral reading" as now found in grades one to seven.
 - b.* Note probably harmful effects of trying to "correlate" study of "silent reading" with other studies, including literature; but also desirability of special drills on each new field of printed subject matter—e.g., algebra.
 - c.* But note potency of by-education as result of newspaper and general reading (including "movie" legends) from 10th year on.
 - d.* State current problems of teaching (printed) word recognition; phrase recognition; and expression. What is "eye span."
 - e.* Probability that reading of script should not be taught for at least one year after reading of "print" has been begun.
 - f.* Define problems of teaching silent reading as approach to each new stage or type of subject matter—geography, arithmetic, history, chemistry, "heavy" magazine," etc.
 - g.* Define problems of interaction of silent reading (as text recognition) and assimilation or apperception of thought conveyed.
4. English writing (including penmanship, spelling, composition, grammatical structure, rhetoric, etc.) one of first objectives, historically, of school education. Note inadequacy of by-education at all stages.
- a.* Penmanship to be regarded as a difficult manual art. Probability that it should not be commenced until second or third year in school life, on pedagogical as well as physiological grounds. Possibilities of substituting "printing" machines (typewriters) at early stages. Physiological and psychological problems of "methods" of teaching penmanship. Qualitative standards and possibilities of defining optimum standards of rate (quantitative standards). Possibilities of successive learning stages, e.g., ages 7, 12, 16. State problems of "special" penmanship for vocations.

- b. Spelling as a specific objective. Discuss problems of scope for successive stages of general education; special spelling, for vocations; and possible effects of by-education through reading.
- c. Composition—need of further specific objectives. Only a few—capitalization, special forms for letters, punctuation, etc.—now clearly defined. Need of definition of problems of structure beyond those found in oral composition. State problems: of source material; interaction of thought and expression in composition; of applying results of studies of grammar, word analysis, “vocabularies,” etc., grammar, rhetoric, etc.

PROBLEMS

1. What kinds of English language—cultural, civic, vocation—should be taught in vocational schools? Distinguish sharply elective from prescribed offerings. Assume as cases:

- a. A medical college admitting only approved candidates with at least two years of general college education.
- b. A “six months intensive” school for barbers, admitting none younger than sixteen, and without reference to grades passed. (Students chiefly children of non-English speaking parents.)
- c. A two years course school for stenographers, open only to persons finishing two years general high school course, and having “good” records in spelling, composition and grammar.
- d. A normal school preparing teachers of first six grades, open only to approved high school graduates.
- e. A two year part-time school of carpentry, requiring completion of fifth grade, age of fifteen, and exceptional bodily development for admission. (Applicants usually crude in oral, and deficient in written, English, and without interest or consciousness of need of further studies.)
- f. A “six months” intensive school of homemaking designed for women, heretofore wage-earners, on eve of marriage, ages 20-25, from varied wage-earning vocations—factory, clerical, selling—and of variable schooling—fifth grade to high school graduation.

2. The belief prevails widely that a “second language” contributes substantially to mastery of English. Analyze probabilities, and also indicate specific problems for experimental investigation, in following cases:

- a. Journalists, statesmen, preachers have vocational needs of wide range of vocabulary, keen discriminations of verbal meanings, correctness of language structure, and “fine expressiveness (rhetoric) in writing.” What would study of education of the following persons suggest as to respective contributions of: native talent, second childhood vernacular, classic language study, systematic study of vernacular and systematic study in

youth of second modern language; Demosthenes, Euripides, Cicero, Francis Bacon, Burke, Alexander Hamilton, Browning, Whitman, Poe, Hawthorne, Webster, Lincoln, Tolstoi, Kipling, Shaw, Roosevelt? What could be shown by study of less gifted, "B grade" persons known to you? In comparative studies of, e.g., successful Americans or Englishmen, how can we evaluate "socially selective" effects of traditional schools for "cultured" classes? Even if "classical learning contributed nothing to proficiency in English, should we not expect to find that nearly all leading English writers and speakers since 1650 had studied the classics?

- b. Large numbers of French-Canadians are "bi-lingual." Can evidence be found as to whether such conditions improve or handicap the most needed tongue?
- c. What specific powers of correct usage (grammatical) in English can be traced to the enlightenment or training obtainable from grammar and composition study of: Greek, Latin, Spanish, French, Japanese?
- d. What specific rhetorical powers can similarly be traced?
- e. What specific powers over rich and sensitive vocabularies?
- f. What specific vocal powers?

3. Back of good English expression are two general factors: (a) content (ideas, feelings, concrete experiences, etc.); and (b) motives for communication that shall produce desired results for auditors or readers. Analyze some possibilities of establishing specific school objectives in these fields precedent to conscious work on language objectives. Suggestive examples among others are:

- a. The "experience producing" effects of travel, new companions, wage-earning work, scouting, self-initiated reading, practical arts projects, etc.
- b. Motivation resulting from requirements of vocation newly entered, debating, new associates, changed social station, etc.

Is it likely that school studies of the prescribed order, taken in perfunctory spirit, contribute to these general means? Observe such factors as:

- c. Intensities of desires for communications to teachers, companions, parents, other superiors, accounts of experiences or ready made ideas from school studies of history, literature, science, geography, vocational learners; all, ages 4-6; the "gang followers," ages 10-14; intellectually elite girls, ages 14-18; students in vocational school of law, elementary teaching, indoor salesmanship (girls).
- d. Discrepancies between "classroom" and playground English as regards precision, forcefulness, correctness.

4. The chief sources of "by-education" English are, for ages 1-5, parents; and thereafter, associates of equal or slightly superior age. Latter

source tends towards narrowness of range and speed and precision of actions. Is it not true that, for the purposes needed, such language—especially in oral phases where intensity of habituation is assured—is adequate and fully satisfying? From sociological viewpoint it represents only “small group” needs and powers. The school’s function, then, is to correct and extend so far as known “large group” needs require. Can not this approach be better employed than at present as source of motives? Under this head consider slang, localisms, approved clique, gang, set, and shop standards. Give instances where shame of individual deficiencies and at “small group” standards has been established; and of ambitions for “better” things.

5. Criticism of lower by higher schools often takes form “this learner cannot read the printed page.” How far is ability “to read the printed page” dependent upon acquaintance with ideas being conveyed? How many elementary school graduates can read a page of: Browning, Burke, Gibbon? How many college graduates can read a printed page of Kant, Amy Lowell, Newton, Loeb?

6. In schools with departmental teaching, “who shall teach English”? This is obviously an unsettled problem and a source of acrimonious discussion. The following theses are suggested for study.

- a. One set of school objectives—often of written, and sometimes of read and spoken English—is peculiar to certain studies—pronunciation of names in ancient history, punctuation in mathematical tabulations, spelling in medicine, English structure in Latin translation, spelling in geography, pronunciation in singing, handwriting in bookkeeping. Responsibilities for training in these techniques belong to the department concerned, not to the English language department.
- b. Another set of objectives involves instruction and preliminary training in *new* principles and practices of more or less general application. Responsibility here belongs to the English language department.
- c. But a third group of objectives involves *holding learners up to standards already understood*, but only partially established as habits. Here all teachers—and outsiders, too, if that is practicable—should coöperate to prevent deterioration of pronunciation, handwriting, spelling, structural usage, vocabularies, etc. But such maintenance of incipiently established standards must not become “fussy” and “nagging,” otherwise, self-consciousness supervenes, and, in non-English studies, expression rather than content becomes the end of effort.

CHAPTER XXVII

FOREIGN LANGUAGES AND LITERATURE—ANCIENT

These here taken to include Latin and Greek, but principles apply equally to Hebrew, Old English, Arabic, etc., which, as languages, persist to-day only in limited areas and in decidedly modified forms, and the literatures of which reflect very alien cultures and inspirational forces.

1. For Western World studies of ancient languages and literatures of much importance in periods of renaissance when they were large and vital sources of knowledge, ideals. Note also long period during which Latin was only medium of scholarly intercourse.

- a. Traditions of these values persist even after (a) extensive literatures have been created in vernaculars, (b) vernaculars become more available for scholarly intercommunication, and (c) vernacular literatures in large measure have assimilated and express (except as to niceties of art factors) significant content of classical literatures—because: (1) other materials of study not well organized; (2) social demand for an “aristocratic, exclusive and somewhat mystic culture”; (3) dominance of public, and even more of endowed education by the “successful” products of classical education; (4) sheer traditionalism of successful educators and theologians—and, to lesser extent, lawyers and magistrates—whose influence has been strong in determining educational standards; (5) vogue of theories of psychological “faculties,” leading easily to beliefs in virtues of educational “simples” or specifics for general mental training; and (6) beliefs that study of classical languages enhances powers to use vernacular or to master modern languages.
- b. Classical languages and literatures once central means in pursuit of “humanities,” “appreciations of the higher (or highest, some think) of things human.” Note vagueness of definition of humanities and probability of close connection with studies suited to a “leisure” (gentlefolk) class. Per contra, note connections with Protestant reformers, educators, magistrates and theologians in revival of learning which leads down to yesterday in modern England, Germany, America.
- c. Note persistence as requirement for admission to college and for A.B. degree.

2. Waning influence of Latin and Greek languages and literatures in liberal education conspicuous in recent years. Note decline first in Latin

countries, longest persistence in England, America, Germany. Factors in diminishing influence:

- a. Widening range of secondary education, necessitating non-classical curricula to meet democratic needs.
- b. Diminishing fruitfulness of classical studies in *new* ideas and ideals, and, on other hand, increasing efficacy of non-classical studies for same purposes.
- c. In very recent years, diminishing confidence in these studies as of exceptional value for: (a) mental training; (b) basal contributions to study of English and modern foreign languages; and (c) culture attributable to "humanities."

3. Contemporary problems:

- a. On part of individual, what degree of mastery of a classic language and its best literature is requisite to produce in significant measure: (a) a functioning culture? (b) functioning appreciations that are of "the humanities"? (c) reinforcement of English?
- b. On part of society, what proportion of individuals learned in the Latin and Greek classics would suffice in optimum measure to keep alive social interest in them and to translate anew their values? (cf. Hebrew, Arabic, Irish, Norse, Sanscrit, Chinese, Inca.)
- c. To what extent for youths of scholarly capacities, can more modern sources furnish equivalent values?
- d. To what extent can society derive equivalent values from more modern sources?
- e. In what ways and to what extent does study of classics (as, e.g., possible in modern secondary school and when taught by methods now approved) reinforce powers to use English? Capacities to appreciate English products?
- f. What are specific possible contributions from study of Latin to study of: Spanish? French? German? Russian?
- g. What are, specifically, alleged possible contributions of study of Latin to mental discipline?
- h. What are possible contributions of some knowledge of Latin to study of: medicine? law? biological science? music?

4. Proposals for consideration:

- a. Large, prosperous schools might open classes in Latin and Greek for pupils 12 years of age or over who, fully advised, give promise of lasting interest, and whose language studies thus far give promise of ready mastery. (But secondary school pupils should not be permitted to take *both* Latin and Greek; the second might be taken in college.)

- b. For students already successful in English and a modern language, a short course in Latin open at beginning of 11th grade, and designed to reinforce English and the modern language.
- c. An elective short course in "Word Analysis," dealing with various sources of English vernacular, open in 8th or 9th grade.
- d. Cultural short courses on Roman and Greek literature approached through translations—10th to 12th grades.
- e. Final abandonment of prescriptions of Latin—for graduation from any school, for admission to any school, or for any standard degree.

CHAPTER XXVIII

FOREIGN LANGUAGES AND LITERATURE—MODERN

1. Modern Languages here taken to include French, Spanish, Portuguese, German, Russian, Japanese, Chinese (or form thereof) and the literatures in these tongues approved by contemporaries.
 - a. Note that French or German or both are frequently prescribed and almost always desired among college entrance qualifications; that gradually one of these has been accepted as alternative to Latin; that probably one-third of all high school students give some time to French or German; and that cost of these offerings now in American high schools is probably upward of seven million dollars yearly.
 - b. Offerings of Spanish increase very rapidly in high schools, especially commercial departments.
 - c. German—rarely other languages—taught in some school systems in grades, usually to children of German-speaking parents.
2. Objectives of modern language instruction most ill-defined at present in secondary schools.
 - a. Among possible objectives no clear-cut differentiation is made between reading and speaking powers, though the first might, within moderate limits, be accomplished in four or six years of well directed work.
 - b. Written composition is frequently required, but purpose not clear.
 - c. Surveys are needed to determine: (a) kinds and degrees of mastery desired; and (b) proportion of cases in which attempted goals are realized. Specifications under (a) should distinguish: (1) preliminary superficial "bowing acquaintance" with language as printed; (2) partial reading knowledge of current prose (as found in newspapers); (3) substantial reading knowledge of "approved" literature, including poetry; (4) comprehensions of colloquial vernacular as spoken; (5) ability to speak intelligibly; (6) ability to write (e.g., business correspondence) plain prose; (7) (add other standards). Specifications under (b) should discriminate and evaluate usual results for (1) secondary school pupils terminating study after "two-years' course"; (2) secondary students meeting usual two- and three-point college entrance standards and no longer

continuing study; (3) probable results of four years in secondary school and four years in college given to one language; (4) results of "four years" divided between two modern languages; (5) results of intensive short courses for scientific reading; (6) other practices.

3. Survey needed of qualifications now usually possessed by teachers of French, German, and Spanish. In most cases, probably meagre. Could they sustain easy conversations with natives of foreign country? Could they write? Note frequency with which high school teachers attempt to teach *two* modern languages.

4. Proposals for discussion:

- a. Small high schools (combined with junior high schools) should offer only one modern language; this should be designed primarily to establish reading knowledge, and methods should be devised to that end; only pupils above average in English, and probably able to continue study for several years, should be admitted; if possible, study should be begun at 12, perhaps using no reading at first; and every reasonable effort should be made to have student continue language four or preferably six or eight years to point of working mastery of prose reading.
- b. Schools with large resources, after making provision of reading knowledge on part of promising students, may open limited classes designed to impart speaking and writing powers. Objectives here to produce interpreters, translators, and others capable of *use* of foreign language, including interpretation of culture materials. Japanese, Russian, etc., included. Every effort made to retain pupils until effective mastery reached. Endowments for foreign travel desirable.

5. Given large commercial department—400 girls, 100 boys—in high school of prominent Indiana city. School authorities find strong demand for Spanish, as much among girls as boys. They desire department to be effective since its maintenance costs nearly \$50,000 per year. They ask (a) your administrative recommendations in light of present knowledge, and (b) your recommendations as to surveys and other means of scientifically determining best course of action, as to:

- a. Whether Spanish should be (1) prescribed or (2) offered electively as a vocational subject in their commercial department.
- b. What kinds (including lengths) of courses should be provided.
- c. What should be the vocational objectives and what reasonable expectations from these courses?
- d. Should election of these courses be restricted on basis of (1) sex, (2) probable commercial vocation, (3) native ability, or for other reason?

- e. What will probably be a reasonable per capita cost of such courses for satisfactory attainment?
 - f. It is planned to reorganize courses so that stenographers' courses for girls, and all courses for boys (except office service, short course) shall presuppose completion of two years general high school work. Girls' salesmanship and "office aid" courses may be taken by those of only elementary school education. Should the election of Spanish now be permitted in first year of general high school?
6. Take similar problems for following cities; Baltimore, San Francisco, Minneapolis, San Antonio.
7. A rich Pacific Coast state, recognizing the social need of readers and speakers of Japanese in its midst, and being aware of the difficulties of providing proper instruction and training therein, provides two "encouragement funds," annual appropriations of \$100,000 to be used in secondary (junior and senior) schools, and \$50,000 to be used in state university. (a) Devise on basis of present, a plan for the work, including (1) analysis of desirable objectives (and social ends to be served), (2) plans for selecting schools, (3) plans for selecting pupils, (4) plans for securing teachers, (5) travelling aid, funds, etc. (b) Suggest certain investigations that should be made by experts before final plans are adopted.
- a. Would you recommend action similar to foregoing for New York, Missouri, Nevada?
 - b. Could you urge pupils to elect work offered on grounds of probable personal advantage (1) culturally, or (2) vocationally.
8. Formulate similar case problems with regard to: Chinese; Russian; Portuguese; Danish.
9. What are advantages and disadvantages of having one or more modern languages taught by specialists (governess, nurse) in homes at ages 2-7 (as frequently done in the past in Europe, especially Russia)? Would you advise educational leaders to urge parents who can afford it, to have languages so taught? Would you advise the use of public funds for this purpose? Would you recommend use of public funds to teach a modern language in schools for children ages 6-10? 10-12? 12 upward?
10. If "easy reading of current non-literary" products is the specific goal of (a) Spanish, (b) French, (c) German, or (d) Japanese, to what extent is "grammatical knowledge" needed, and what phases of grammar?
11. On basis of concrete analysis of needs, and having in mind probable social conditions of the next ten years, indicate difficulties and advantages, respectively, of securing results from (a) English vernacular and

(b) foreign vernacular teachers for (1) reading knowledge of French, (2) speaking and writing knowledge of French, (3) preparation for Argentine business, and (4) speaking knowledge of Japanese.

12. Outline plan for training teachers of Spanish, including provision for one year's residence among Spanish speaking peoples. Estimate total probable cost.

CHAPTER XXIX

MATHEMATICS

The term "mathematics" is here used to include arithmetic, as well as studies usually found in secondary schools.

1. A confusion of objectives has long prevailed in all mathematics teaching.

- a. Vocational needs (farmers, builders, navigators, lumbermen, engineers, small merchants, investors) of special classes of workers have been taken up for general application in schools. Hence the importance attached to: various forms of denominate number tables; applied percentage; mensuration; solid geometry; trigonometry, etc.
- b. Mathematical exercises readily fitted to illusory schemes of "mental discipline" as "panacea," "simples," gymnastics. Note ease with which teachers can assign and supervise difficult work; also complexity and endless quantity of unapplied (and unapplicable) mathematics readily available for school use. Note, e.g., persistence of mathematics in women's schools and colleges and in other institutions adhering to the traditional.
- c. It is easy to produce plausible defences of "culture" values of mathematics—as giving abiding interests, expanded concepts for interpretation of environment, valuable logical "forms" of thought, appreciations of "control" of nature through mathematics, etc. Ideally, and for a few special types of minds, functioning of this kind feasible; is it so for many? Doubtful. Would test of "interest" apply?
- d. Educators foster belief that secondary school mathematics is required for studies (presumably in science, economics) subsequently to be pursued. Mythical character of this belief.

2. Proposals for reconstruction: distinguish sharply general needs (users, consumers, or common to many vocations) from specialized vocational needs; develop new means of attaining "appreciation" (cultural insight) ends in mathematics; and make mental training a necessary accompaniment of all teaching designed for permanent "functioning."

- a. Certain amounts of mathematical knowledge and skill are necessary for men and women in their common activities as buyers, users, travellers, general readers, citizens. Effective mastery of these doubtless requires: definite drill on funda-

mentals; much experience and training in applying to concrete usual life situations; and omission of all complexities.

Beyond that called for here, is any mathematics needed as *common* element in many vocations? Doubtful.

- b. Vocational mathematics should be provided after vocational choice has been made (continuation school for young persons already employed, evening school for apprentices over 17, vocational school, prevocational trigonometry in high school for prospective engineering students, short courses for persons seeking foremanship or higher stages, etc.) Probably, best results can be secured here (a) by clearly defining ends in terms of actual requirements of particular vocation; (b) by teaching in part through definite application, etc.; and (c) by using to full economic motives.

Mathematics required for prosecution of subsequent studies (after period of compulsory school attendance has been passed) should be offered in same way as vocational mathematics.

- c. Among beta studies designed at various stages in growth to give appreciation of, and insight into, material and social environment, should be offered appreciation courses of mathematics, of which no present types exist. Such courses no more require technical knowledge of mathematics than do appreciation courses in music, painting, poetry, science, home decoration or travel require technical knowledge and skill in composing, painting, verse-making, research, calcimining, or navigation. Such courses would include: stocks, exchange, compound interest, commission, insurance, solid geometry, much of mensuration, triangulation, calculus, statistics, etc., all so presented as to produce appreciation, vivid and interpretative, of man's use of mathematics as aid to short expression, accurate description, instrument of precision, revealer of laws, means of control in war, building, mining, harnessing natural forces. Effective means (readings, pictures, models, etc.) all yet to be devised.
- d. Beliefs in superiority of mental arithmetic, cube-root, partial payments, algebra, geometry, etc., as instruments of mental discipline (mental gymnastics) now questioned. (Illusions of faulty psychology here persist, as well as Puritan distrust of "easy gains.") Functioning of any exacting mental activity (geometry, verbal memorization, chess, Scout observation of nature, puzzles) doubtless much dependent on interest, self-activity. Present tentative solution: do not seek mental discipline as a primary and determining end of any extensive subject or series of educational activities. Let other and more demonstrably realizable ends (cultural, civic, physical growth,

vocational) determine choice of subject matter, activities; then so realize these ends that right and effective mental training results as an accompanying process.

3. Miscellaneous proposals.

- a. Desirable that experiments be made as to desirability of abandoning all alpha arithmetic until ninth age year or third grade.
- b. In junior high school, differentiation of general or consumers' arithmetic along main lines to correlate roughly with practical arts or prospective interests, industrial, commercial, agricultural, household. Avoid illusion of "prevocational."
- c. No prescription of mathematics for entrance to, or graduation from, high schools or colleges of general education. Specific and demonstrably needed special prescriptions to apply to all vocational schools.

PROBLEMS

Because of many prevalent faith assumptions and even superstitions relative to mathematics, these problems need investigation. In each case (a) give your present carefully analyzed opinions and (b) suggest means of scientific inquiry.

4. What are the prevailing needs of (a) higher arithmetic, (b) algebra and geometry, and (c) trigonometry in the following vocations: dentistry, artillery officer, drygoods salesman, stock farmer, real estate agent, bank cashier, architect, expert accountant, homemaker, stenographer (girl) teacher of modern language, electrical engineer, oculist, hotel cook, carpenter.

5. What are the prevailing needs of mathematics for the following college studies as ordinarily found in "liberal arts" courses: English literature, Spanish, chemistry, home economics, economics, ancient history, English history, physics.

6. What are the prevailing "consumer's" needs of each of the following: (a) a man of college education, family expenditures, \$5,000 per year, actively participating as a citizen (not office holder) in politics, reading the "best" magazines and newspapers, and participating generously in current culture. (b) A skilled artisan of average interests in politics. (c) A woman of thirty, spending for living \$1,200 per year, and only slightly interested in current politics and culture.

CHAPTER XXX

NATURAL SCIENCE

1. For purposes of this syllabus, all science is treated in three main divisions: natural, mental, social.

- a. Fundamentally, all phenomena considered by "science" are "natural." But convenient custom makes "natural science" exclude phenomena of society, and of mental action, although including phenomena of human physiology, hygiene, etc.
- b. "Natural science" as here used includes data and phenomena usually embraced under physics (mechanics, hydrostatics and hydraulics, electricity, optics, etc.), chemistry, biology (zoölogy, botany, bacteriology, physiology, etc.), astronomy, geology, earth geography (human geography is placed with social sciences), etc. There are included also "applied" natural science—agriculture, hygiene, engineering, navigation, etc. Anthropology, ethnology, history, economics, etc., are placed with social sciences. Mathematics is given a place apart.

2. What does or should "science" mean in education? Interpretations must be broad. All the objective facts of nature belong here when viewed by the learner as non-mystical, as explainable in terms of "natural" law or causation, as capable of organization in sequences and structures. The attitude of the viewer is largely determinative—does he see in sensational, curious, uninterpreted phenomena ultimate play of "natural causes" (as opposed to the animistic causation imputed by primitive minds)? Has he general conviction that, given time and means, rational explanations are obtainable—of tides, earthquakes, images, magnets, bird migrations, disease, souring of milk, vaccination, flowing sap, wireless telegraphy, man's skeletal resemblance to chimpanzee, air-borne contagions, nurture of infant eels, oil in sandstones, vermiform appendix, fear of the dark? If so, he has the beginnings of scientific insight and attitude.

- a. For the purposes of the scientist, disposed to disregard infant stages, higher standards may be necessary to define the "classified and tested" knowledge to be included under any science. But standards of adults of specialized capacity are hurtful in education of youth in all fields—art appreciation, practical capacity, language power, no less than science. Older sciences, astronomy,

mechanics, chemistry—have advanced far interpretation of comprehensive relationships and unvarying sequences—laws, principles, generalizations, explanations. Clear demarcations are here established between ascertained specific and general facts and hypotheses or theories. But the child must scale these heights gradually. Scaling foothills, if peaks are kept in view, will constitute sound introductory pedagogy—child-leading.

- b. Hence science study adapted to any stage of mental development will not seek to go far beyond limits of accessible (i.e., instinctive or environment-stimulated) interests, and found capacities for genuine assimilation. But however far it goes, it should observe phenomena as real things, as naturally (including humanly) caused, as, in greater or less degree, explainable on basis of law, principle, generalization.
- c. Wrong pedagogy of science teaching attaches excessive importance to *fundamental* explanations early reached—forgetting that even in oldest science we have yet few *final* explanations. In astronomy, learning that sun does not move about earth was a great advance; that earth moves about sun was another; that planets and sun constituted a “system” was another; but back of these known fields are many yet to be explored. Even young child can very readily be led a little way in observation and interpretation of scientific phenomena; older ones will go some farther; and the exceptional few very far.

3. What purposes should control in the use of natural science in education?

- a. In various fields of vocational education special forms of instruction in science, and training in use of scientific media are required. (a) “Some knowledge of chemistry” (as we say, vaguely) is required on the part of the youth preparing for the callings of assayer, physician, pharmacist, chemical engineer, metallurgist, etc. (b) Is “some knowledge of chemistry” also required of the prospective farmer, cook, plumber, electrician, chauffeur, dyer, toolmaker, dentist, school nurse, primary school teacher? If so, what? Chemistry as a separate study, or simply some detached units from chemistry? Distinguish among educational knowledges, beliefs and superstitions in this matter.
- b. Repeat above analysis for: (a) Relation of physics to mechanical engineering, medicine, machine shop practice (foreman), machine shop practice (machinist), machine shop practice (specialty worker), gardening, poultry raising, captaincy (ship-board), captaincy (army), dentistry, homemaking, textile factory working, plumber, chauffeur, etc. (b) Relation of astronomy to navigation (captain), navigation (third mate), navi-

gation (sailor), farming clairvoyance, aerial navigation, etc. (c) Relation of bacteriology to fruit raising, lumbering, war leadership, homemaking, dentistry, nursing (child), nursing (bedside), etc.

- c. From the standpoint of man as a neffective "user" (consumer, utilizer) some kinds of "appreciation" of science seem desirable. (a) What kinds of scientific knowledge will make men in certain threatening situations as regards health consult best available "technical"—i.e., scientifically equipped—service instead of purveyors of advertised drugs, "faith healers," "voodoo doctors," unqualified midwives, etc.? (b) What kinds and degrees of scientific instruction and training will give us individual buyers capable of distinguishing (or of obtaining advice) as between the true and false, the genuine and the imitation, the pure and the adulterated in foods, clothes, furniture, fertilizers, decorations, vehicles, medicines, tools, etc.? Or collective buyers (voting citizens) of street paving, building materials, gas, water supplies, drainage, civic buildings, etc.?
- d. From standpoint of common "likemindedness," "citizenship," mutual understanding of each other, vital appreciation of world in which we find ourselves, fairly comprehensive (but not deep) appreciation of scientific explanations of natural and artificial phenomena probably desirable for all. Include appreciative understanding (with some idealization when definable) of: electric traction, rain, moon's phases, rotting of fruit, photography, volcanoes, deep sea life, interstellar ether, mountain sculpture, moving pictures, color printing, soil fertilizing, yellow fever prevention, animal eugenics, earth's age, pottery glazing, seed transportation, sun spots, placer gold mining, concrete building, balanced rations, detonation, telephony, and thousand other phenomena studied under "pure" and "applied" science.

PROBLEMS

4. The chief problem of natural science teaching at present is determination, first of desirable beta objectives, and, second, of finding curriculum organization and method for them.

- a. Real "out-of-doors" nature study suggests one type of method; "self-teaching" readings another; "home experimental science" a third; and the moving pictures a fourth.
- b. Is the single text in "general science" a practicable means for pupils? Doubtful. It necessitates too much condensation, systematization, formalization for beta objectives. It assumes unobtainable resourcefulness on part of teacher. Good general science should be so organized as to become no less "self-teaching" than good literature, practical arts, and physical sports. Scouting and home gardening also suggest valuable methods.

- c. Each pupil, under advice of teacher, should be expected to fill time elected or prescribed profitably, provision being made for coöperating groups and conferences for report. Obviously—great flexibility is necessary and much reading matter.
- d. For the present, the junior high school is the most feasible place for experimentation with beta objectives. Intellectual curiosity is strong, and spirit for project work at its best.

5. Science subjects as "prevocational" or "related technical knowledge" in vocational education, belong clearly in the alpha class of objectives. The present need is for greater definition of these objectives as related to named vocations. Even in professional this area abounds with schoolmen's superstitions.

- a. Two methods are here opposed. Under the first, an entire "pure" subject is first taught—as in the case of trigonometry for prospective engineers. Then problems involving applications are taken up. Under the second, practical projects are taught from the outset, as in the case of farming for boys of less than high school education; and as science topics are suggested naturally by project—from fields of mathematics, chemistry, physics, meteorology, bacteriology, economics—these are studied as "related knowledge." The latter method is probably the only one practicable for many vocations and possibly best for nearly all; but it lacks pedagogic analysis, definition, and documented examples as yet, hence it frightens progressive teachers, whilst the unprogressive deny its practicability at any time.

6. Where and when shall "science for consumer's needs" be taught? This problem may have to wait clearer definition of educational objectives for utilization; but following suggest possibilities:

- a. Hygiene, when properly taught as now conceived, involves so much of scientific enlightenment as may be necessary to assure right selection and utilization of: foods; clothing; shelter; developmental activities; recreative activities; precautions for safety against accident; precautions for safety against vocational strains; sex activities, etc.
- b. Similarly sanitation uses scientific means to produce needed understandings.
- c. Vocational schools—including those of homemaking—rightly design to teach all needed science of vocational utilization.
- d. Probably all schools, but especially those for ages 12-18, should develop utilization (i.e., liberalizing) courses having as objectives right standards and practices of utilization in such areas as: general current reading; travel; recreation for adult workers; and others, in connection with each of which the needed science and art would be taught—as "appreciation" subjects.

CHAPTER XXXI

MENTAL SCIENCE

1. The term "mental science" here used (as analogous to "natural science" and "social science") to include studies and practices designed to give comprehension of operation of mental powers, to develop appreciations and ideals as to their control, use and development and to give some mastery of processes of such control, use and development. (Compare with certain objectives of physical education—ideals of physical development; insight; practice, etc.)

- a. As in case of natural and social science, environment and daily experience provide super-abundance of the *materials* (data, facts, experiences, observations) of mental science study for all grades from first to twelfth. But present means of making such materials pedagogically available are utterly inadequate.
- b. "How to Study" now a promising approach in grades. But we need extensive analysis of specific objectives of learning—e.g., how best to memorize poetry, build French vocabulary, learn touch typewriting, keep mind from objectionable brooding or woolgathering, solve mathematical problems, etc. Doubtful if young people can derive advantages from abstract studies of learning processes.
- c. For high school, need of some systematic approach to units of study important for adolescents, presented objectively, and concretely. Pathological aspects and introspective methods doubtless should be greatly subordinated. Practical applications (even working projects) to be found in control of formation (or breaking) of specific habits, acquiring certain specified forms of knowledge, evoking and giving active effect to certain sentiments and ideals. Doubtless self-consciousness always to be avoided, personal privacy respected, as in teaching physiology and hygiene. "Present company excepted" a good motto in conference.
- d. Here should be developed also means and methods of realizing some large objectives of mental training. (a) The ideal of "a good memory." May be generalized from experiences with many special "powers" of memory—for words, dates, names,

faces, logical chains of associated ideas, "visual memories," "auditory, olfactory, tactile memories." If "formal discipline" (general mental discipline or training through educational "simples"—geometry, Latin, bench work, manual-of-arms drill, etc.) is possible, its realization must start here in conscious effort. (b) "Scientific attitude" towards nature's presentments—facts, data, phenomena, principles, laws. (c) Scientific attitude towards man's presentments—legend, tradition, gossip, rumor, verbal report, written report, record, document, monument, and other human products used in transmission and increase of knowledge.

2. What shall educators hold as practical doctrine regarding "mental training"? General ideals here as real as those of physical training, moral character training, etc. For many years to come public will think certain studies peculiarly potent to give training in memory, reasoning, observation, thinking, concentration, system, neatness, taste, industriousness, enthusiasm for work, common sense, loyalty and other generalized good qualities. Teachers must see that this attitude is due to easy mistake of assuming one "species" as identical with the "genus." The close and persistent "observation" required in proof reading, or Latin composition, or drawing obviously will if long practiced result in highly developed specific powers; but easy inference that generalized and analogous powers are thereby produced probably fallacious in most cases.

a. Note, however, that certain by-products may "transfer" or "spread" to related fields—e.g., ideals of successful accomplishment, of orderly procedure, of "being scientific," of thus attaining social approval. Some think "methods of work" as habits or knowledge also "spread." Obviously this becomes a fertile field for educational magic, superstition, quackery.

b. Trace historic beliefs to present as to: "mental training values" of verbal memorizations, Latin, geometry, mental arithmetic, clay modeling, drawing, introductory science, grammar; "manual training values" of sloyd, drawing "sense training" through gifts (of kindergarten), art studies; "physical training" through Indian clubs, gymnastics; "moral training" through punishment, precept.

c. Note almost preternatural specific powers of attention, verbal memory, observation, sensitiveness to sound, and industriousness developed among primitive men. Have these meaning for education? What of sensitiveness to harmonies of form (and perhaps color) of stone age men in south-western Europe, and of Greek craftsmen?

3. Practical suggestions for educators. Until psychology gives further enlightenment, include the following:

a. Prescribe no subject primarily for mental training values.

(What will be effects on Latin, algebra, mental arithmetic, sloyd?)

- b. Where approved alpha objectives are defined, give intensive specific training of the kinds necessary to their fullest realization—e.g., exactness in needle-work, thoroughness in verbal memorizing (where necessary), careful reasoning in prevocational mathematics, attention in written composition, etc.
 - c. Hold firmly the belief that from sociological study of needs of adult life can be derived many new specific objectives capable of being realized (in part at least) in school life, and especially in that of the transition years from 12 to 18. For example, "a scientific (or wholesomely critical) attitude toward printed matter of a political nature" is surely needed on behalf of the good citizenship of all voters. But it is practicable to begin developing this attitude at ten to fifteen years of age by use of the media (newspapers, weeklies, commission reports) used by adult citizens. (Note needlessness, in presence of wealth of current material, of using the "source method" of history for this purpose.)
 - d. Where experiences in or out of school tend to produce well developed specific appreciations, ideals, habits, or knowledge, these can be used as interpretative, at least, of new similar qualities in which it is desired to enlist interest and effort. Thus may, perhaps, be "spread": the "coöperations" of sports, the loyalties of gangmembers, the industriousness of scouting, the concentration of fishing, the manual exactness of baseball pitching, the scientific interests of homeshop work, the reading interests of penny dreadfuls, the observation interests of movie legends.
 - e. As public service towards popular education, form practice when confronted by sentimental reflections on mental powers such as: "algebra teaches one to work hard," physics "teaches one to think," "all I want (as a business man) in my young employees is "common sense," of asking: "Of what variety or species are you thinking?"
4. For many young people, wage-earning employment is first drastic test of qualities; and employers naturally charge schools with deficiencies revealed. But if current theories are correct, such criticism could be fairly and profitably directed only against vocational schools (and vocational guidance as regards native qualities).
- a. One high school principal reports that employers wanting help only ask, of a boy, "Has he pep?" and of a girl, "Is she quiet?" Can these be taught?
 - b. Many teachers as well as employers complain that young people "have not learned to think." Have you learned "to think"—

about some things only, or all things? How about men and women you admire?

- c. Their greatest lack is "common sense"—said of boys, college graduates, city dwellers, *intelligenza*. Do we or can we "teach common sense"? What varieties have you? frontiersman? sailors? street gamins? alley cats? astronomers? successful politicians?
- d. Young engineers are often charged with lacking "enthusiasm." Have they no enthusiasms? Are they only lacking in strange new varieties that employers seek?
- e. What are the specific varieties of the following "powers" that schools of dentistry, elementary school teaching, stenography, music, indoor salesmanship, and farming, respectively, should resolutely seek to produce up to defined standards: neatness, exactness, thoroughness, concentration, aesthetic taste, verbal memory, logical thinking, alertness, observation, common sense?

CHAPTER XXXII

SOCIAL SCIENCE (INCLUDING HISTORY)

A. GENERAL

Social Science, a division of elementary and secondary education, here includes all those studies, practices, readings and other stimuli which are chiefly designed to promote more effective social attitudes and action as a result of sound knowledge and right appreciation.

- a. The term "social education" is useful to include all by-education and direct education making for better group life. In schools we can organize: studies of community civics, civil government, social geography, contemporary nations, American history, world history, biographies, thrift, morals, character, social psychology, elementary economics, beginners' sociology, ethics; practices of school self-government, coöperative "clean town" enterprises, relief activities, scouting, camping; constructive use of libraries, home-reading, moving pictures, newspapers, drama, election campaigns, home gardening, police power; wage earning; and social (including vocation) guidance.

1. Problems of general aims or objectives for social science not difficult to formulate. Custom gives fairly clear views of the desirable group member. (cf. Analysis in Ross: *Social Control*.) A hundred general terms express social virtues of man, as: defender (courage, self-sacrifice, patriotism, heroism—opposites in cowardice, poltroonry, peace-at-any price, desertion, sneak); respector of property (honesty, fair-dealing, square dealing, uprightness; opposites—greediness, fraud, cheating, thievery, grafting, covetousness, stealing, predatoriness, filching, roguery); controller of personal passions (chastity, continence, temperance, abstinence, frugality; opposites—licentiousness, drunkenness, gluttony, gambling); worker (industrious) provident, thrifty, frugal; opposites—laziness, loafing, vagrancy, spendthriftness; truth-sayer and keeper of promises (trustworthiness, truthfulness, reliability; opposites—lying, deceiving, double-dealing, welshing, perjuring); conformer to law and custom (law-abiding, self-restrained, peaceful; opposites—law-breaking, disorderly, quarrelsome, peace-disturbing, malicious); supporter of weak (charity, sympathy, pity, magnanimity, mercifulness, kindness, benevolence, altruism, philanthropy, generosity; opposites—malignity, uncharitableness, unforgivingness, pitilessness, mercilessness, spoiling); giver of justice (just, fair; opposites—unjust, jealous, envious); progres-

sive (liberal, broad, tolerant; opposites—narrow, Philistine, intolerant, pull-back; social initiator (leader, pioneer; opposites—boss, monopolist).

- a. These "social virtues" in the individual have foundations in social instincts (analyze) and in tensions between individualistic instincts (analyze, e.g., virtuous conduct resulting from individual desire for property of others and for approval of others).
- b. Conditions of material environment (including food supply, etc.) constrain or give openings to these instincts (cf. effects of limited food supply on "property-sense," selfishness, ownership of women; effects of climate on sociability, gregariousness, sex relations, parental control; effects of sea and mountain on industry, providence; effects of desert on conservation of property).
- c. Social environment (including persisting institutions) greatly serves to give specific direction to, to intensify or to suppress, these instincts. (cf. Effects: of family on early stages of many virtues; of gang or clique life on personal qualities; of police power on attitude towards law; of church on altruistic qualities; of press, stage, library, on extension of ideals; of vocation on self-aggrandizing and conforming qualities; of war.)

2. But problems of defining specific aims for the direct education (of either alpha or beta type) of school are largely unsolved as yet.

- a. In case of forming attitudes or habits, function of school necessarily residual in many cases. School does not need to "teach" courage, loyalty, honesty, sex continence, truthfulness, frugality, industry, toleration, reverence, inventiveness, leadership, respect for authority; it finds foundations of these in all its members. School's function is to "teach" certain new kinds or varieties or shades; to qualify existing standards by new valuations. But problems of commanding means of idealization (including valuations) and practice (training) very difficult.
- b. School can readily do much towards interpretation—bringing unseen and unfelt relationship into view, subjecting old situations to play of new lights of appreciations, ideals, e.g. The boy aspires to manhood, then to approved manhood; what are conditions of lasting approval as to courage, loyalty, temperance, industry, etc.? Here will be found large field for social science, probably to be handled by "case" and (perhaps) project system.
- c. All teaching of social science designed to react on personal ideals and behavior fraught with difficulties of invasion of personality—violation of moral "privacy." Large possibilities of discovery of indirect or "third person objective" methods of approach and attack here.

- d. Community civics, civil government, study of nations (contemporary), and history lend themselves readily to impersonal and objective methods; but teaching is often "non-function" on that account.

3. Place of history study in social education. Here several important problems. Under what circumstances does history study "function" in important social habits, appreciations, ideals, insights, knowledges, etc.? (Use of some history might also be promoted for cultural purposes; and, in some cases, for other ends.)

- a. Human knowledge of history was early organized (like Latin grammar, geometry, algebra, logic, Latin classics, geography). Hence easily became traditional element in curriculum of secondary and higher schools. Men of keen minds, seeking extension of knowledge, turn naturally to history. Inference that it is valuable educational agency easily arises. Vague notion that past can guide to future (it certainly can explain the present). Democratic citizenship requires general study of history—a popular belief. Are *facts* of history important? *generalizations*? *ideals*? and for what ages and classes?
- b. History organizes naturally on (1) territorial (or national) and on (2) chronological basis. Compare relative importance of remote and recent history as regards (a) illuminating problems of citizenship, (b) fostering approved social ideals, and (c) giving appreciation of scientific attitude towards historical data and records. How much of chronological history (e.g., American, world) is desirable for conception of unity of history?
- c. How can appreciations of social evolutions, development, progress be developed?
- d. Make distinction between "history" and "materials of history." Objectives of incorporating latter as found useful, in social science study of contemporary problems. Provide for students (a) 11 to 14, (b) 15-18, (c) 19-22, series of topics, projects, cases in social study for citizenship; in each case what "materials of history" can usefully be employed?
- e. Outline course of "units" in social science designed to give historical perspective or conception of chronological order, to take two per cent of school time each year, ages 6 to 18.
- f. Outline course in current material designed to produce "scientific attitude" as regards reports and records for youths 12-18.
- g. In social science for junior high school, what shall be criteria of selection of cases, projects, topics and other teaching units? Conditions of flexibility of choice for learners? How use history?

4. Problems of differentiating alpha and beta phases of learning in social study are many.

- a. What are varieties (and scope and character of each) of social by-education achieved by home, 0-6? 6-12? 12-16? 16-18? What are corrections or reinforcements required by schools?
- b. Same for church? playground? press? stage? police power? library? club? vocation (12-18)?
- c. What species or grades of instinctive social qualities are recognized by schools, for different age, economic, migration, racial, sex groups?
- d. What are beta types of school activity in social education for ages 4-6? 6-12? Differentiate: social play, mutual aid, standards of behavior (including school order), socialized work, "auditorium" coöperation (Gary), sports, altruistic pursuits, (Boy Scout), stories of achievement, current literature of youthful ideals, vocation guidance, patriotic songs, stories of peoples, stories of individuals.
- e. Are alpha types of social education needed, 6 to 12? What?
- f. What are suitable types of beta school activity in social education, 12-14? 14-16? 16-18? 18-22? Analyze problems of organization; flexibility; adaptation to local environment.
- g. Analyze problems of social education in vocational schools, e.g., printing, farming, homemaking (hereafter called sociological phase of vocational education). To what extent of beta type?

5. Analyze Boy Scout movement as means of social education.

- a. Note its utilization of the "natural growth" qualities, its flexibility of means, its freedom from illusion of formal discipline, cumulative character of its devices, its creation of atmosphere of idealism.

B. THE CASE GROUP" APPROACH TO PROGRAMS OF CIVIC EDUCATION

1. Most adult Americans are now fairly good citizens; but they are not good enough to meet our more complex needs and our more exacting standards. Hence America wants more and better education for citizenship; and it seems probable that much of this additional education must be expected from schools, rather than from home, churches, community contacts, political parties, and the other agencies that have, and supplementing the schools (literacy, discipline, American history, geography), given us as good citizenship as we now have.

2. The citizenship of our men and women now varies greatly. Some are very good, some very bad, and many are average in composite good citizenship. But also the citizenship of different social groups and classes obviously varies greatly. The species "illiterate negro men in the South of from thirty to forty years of age" contains some very good and some very bad citizens; but the majority exhibit certain *prevailing* qualities

(civic virtues and civic vices) that are characteristic. Similarly the species "men high school teachers, ages thirty to fifty" contains some very good and a few very bad citizens; but the majority exhibit certain distinguishable prevailing civic virtues and vices, which are sometimes unlike in kind, and often in degree, those exhibited by the species "illiterate negro men."

3. Much of current theory and practice of civic education, following the easy ways of deductive reasoning from *a priori* premises (themselves often of doubtful sociological validity) so tends towards assumptions of uniformity as to become unserviceably vague, general, Utopian. These "lumping" characterizations include: (a) educands—"the boy," "the pupil," the high school pupil, the negro, the immigrant, the drafted soldier, the new woman voter; (b) objectives—"good citizenship," Americanization, patriotism, knowledge of history, obedience to law; and (c) means and methods—civil government, American history, the "project method," etc. Many of these unanalyzed and indiscriminating characterizations are as primitive and unhelpful as the sweeping formulae of old-time medicine and of Bolshevik political science. They tend to rule out of court social diagnosis and prognosis. They prescribe uniform treatment for well and sick, for those of good as well as for those of bad, civic prospects. They ignore the implications of "job analysis" as this might be applied to the "job" of citizenship; and their effect is a constant disregarding of the contributions towards approved citizenship of homes, community associations, labor unions, the police power, etc.

4. The situation would not be so confused if the "materials," the "organized knowledge," the available subject-matter of civic education, were not so superabundant. World history, American history, industrial history, political science, "civil government," matter descriptive of local governmental agencies, economics, social science, and now sociology are as extensive and inexhaustible as the oceans of air above us. Like that air they contain valuable stories of how fertilizing and dynamic nitrogen is if economical processes of *fixation* can be discovered. Anyone can tap these reservoirs; and any speculative thinker can give opinions as to how profitable fixation—i.e., civic education—*ought* to be effected. But most proposals seem to break down in *commercial practice* (if the analogy be pressed).

5. It is the writer's present opinion that the most promising method for the discovery of valid and practicable objectives of civic education in schools for various age, environment and (if it should yet seem desirable) ability groups, as well as for devising best methods of realizing those objectives, is what may be called the "case group" method. The chief value of this method is, of course, to force us to consider real human beings instead of abstractions, to think in terms of civic qualities as ends, and of subject matter as means, instead of as now, thinking of subject matter practically as ends in themselves. But other values will also appear as we proceed. Let us place ourselves in the position of a com-

petent committee of three enjoined to study the entire matter of civic education, to point the way to experimentation, and to derive as rapidly as practicable, working programs.

6. First, the committee must agree provisionally upon analytical or descriptive definitions of what it intends to convey by the terms "citizenship," "good citizenship" and "education for citizenship." Needless to say, much confusion exists here, and at certain points arbitrary decisions may well be made. But the definitions will not be serviceable (*a*) unless they indicate analytically which virtues and vices—moral, civic, religious and the like—are *excluded* as well as which are *included* (e.g. "Is good citizenship" the same as "good manhood")—(Is education for health or for vocation also education for citizenship?); and (*b*) unless they indicate, at least provisionally, ratings, for given social groups, of the comparative importance of the various virtues and vices detailed.

7. Next the committee will take for careful study two or more fairly well defined social groups, for example: Case M men, college graduates of American birth, ages 35-55, in business; and Case P, "owning" farmers of American birth, ages 35-55 in Kansas and Nebraska. It may prove desirable still further to delimit and define these groups—only experience can show.

A thousand individual cases, selected at random from each group, will doubtless show some very "good" and some very "bad" citizens by the standards of the definitions. Apart from these extremes large or "type" proportions will be "prevailing" good in certain respects and prevailingly "not what they should be" in others.

It is not necessary to assume (nor would it be practicable now to procure) exhaustive social analysis here. Surely competent sociological or political observers should, even on the basis of general experience, now give fairly reliable answers to questions like these.

- a.* Is the proportion of criminals large in either case group?
- b.* How do the two groups compare as regards the civic virtues of conformity—respect for laws, conservatism, party fidelity, payment of debts, general morality, etc.?
- c.* How do they compare as respects virtues of initiative—independence of political action, reforming spirit, party leadership, social aggression, pioneering of revolutions, etc.?
- d.* How do they compare as respects specified vices of conformity—excessive conservatism, clannishness, opposition to innovations, etc.?
- e.* How do they compare as respects specified vices of initiative (individual or "small group")—such as anarchism, disloyalty, disregard of parties, political freebooting?
- f.* What, in each group, are the most conspicuous civic shortcomings which we should like to see corrected in the next generation?

8. Among the boys of to-day are many who will succeed to the work, opportunities and responsibilities of the adults in the above groups. Let the committee temporarily waive the problem of whether we can now predict which boys of given age levels will probably do so. Let it assume for purposes of scientific analysis of objectives, that a large proportion of the boys now in certain suburbs (Case Ma boys) will succeed Case M men and that a large proportion of those in the rural schools of Kansas and Nebraska will succeed the Case P men (Case Pa boys).

Having these respective groups of boys under consideration the committee will now proceed to make various prognoses. This word has a formidable sound; but, of course, all education procedure to-day rests on more or less blind prognostications of what adults would be without it, and what they are expected to be with it.

- a. Given substantial continuance of social forces now operative—home, school, community environment, rising standards of living, etc.—what will Case Pa boys of ten to sixteen to-day in Kansas rural environment probably become in from fifteen to thirty years, as respects citizenship? How will they probably compare, in prevailing numbers, with their fathers? As respects what civic virtues will they probably be superior to their fathers? Inferior? To what conditions of environment will such new civic deficiencies as they may be expected to show be probably due?
- b. The social situations into which these boys mature (those who remain to become owning farmers) will probably be markedly different from those to which their fathers had to adapt themselves. We might prognosticate weakening of historic party lines; multiplication of public or government functions; increased necessity of collective buying, selling, utilization of large machines, etc. In what respects will these expected new social needs impose requirements for civic qualities that the fathers of these boys do not adequately possess?
- c. Where specific programs of civic education in schools are devised to prevent or correct expected civic deficiencies, what may we reasonably predict as to good citizenship effects some years hence, from citizens who as Case Pa boys now are found to grade respectively low, inferior, superior, and high, in intelligence?

9. In the expectation of probable civic deficiencies, programs of preventive or corrective civic education would be made. The satisfactory definition of specific objectives and the determination of means and methods would probably necessitate observance of certain principles as, for example:

- a. They should be made on the basis of prognosis of administrative limitations—usual ages of compulsory or voluntary school

attendance, funds to be had, kinds of teachers and departmentalizing of teaching available, methods devised, etc. Some kinds of work, for example, could be done if consolidated schools and specialized teaching were presupposed. During the next few years many of these boys will leave school at 16, with only elementary education; what is provided must fit within this available time.

- b. Experiment may show the superior availability of certain types of means and methods at specified age levels: "developmental" (i.e., story, biography) American history, grades 3-6; "projective" American history (formal, purposive), grades 7 and 8 for facts and ready-made interpretations, grade 12 for critical and evaluative (problem) interpretations; "participation projects" grades 6 to 8; "dramatized projects" grades 4 to 7; community "concrete contact" civics (of associates groups) grades 5 to 7; community civics, didactic and slightly observational (federate groups), grades 7 to 9; civil government (formal didactic) (federate group membership) grades 8 to 10; "self-teaching," "thick" books of description, etc., grades 7 to 12; didactic economics or social science, grades 9 to 11; "contemporary social problem method," grades 11 to 12.

From (a) and (b) should, of course, be devised adjustments needed for Pa boys. Is the "self-teaching" "thick" book the most promising available means for Pa boys?

10. Similar approaches could be made for Case Ma boys. The eventuating programs will probably be unlike in many respects. Should that not be expected? Different kinds of boys are being dealt with; the educative effects of their environments are very different; their school opportunities are far from being the same; the expectations of good citizenship that society has a right to expect should probably be very dissimilar.

11. This method becomes, of course, more difficult where we presuppose extremely dynamic environments. It would be difficult to prognosticate the adult citizenship of New York boys of Russian Jewish immediate ancestry, if schools gave no purposive civic education. The only thing certain is that they will be very different from their parents.

Similar difficulties would be encountered in trying to devise programs of civic education for: (a) negro children in northern cities; (b) children of Pennsylvania soft coal miners; (c) bright children in poor rural areas (most of whom will migrate); and (d) children of the "slums."

12. Several interesting problems appear as results of the general method here suggested. In the field of *social* education (here taken to include all objectives primarily of moral, civic, and religious education and excluding all objectives primarily physical, vocational, and cultural), educational writers have long preferred to float in cloudlands of speculation, playing hide-and-seek among the billowing fogbanks of "fundamental principles." They have usually avoided concrete contacts with such

social realities as mental and moral variabilities of native powers, positive and negative effects of material and social environments, and the limitations (modern at least) of what is here called the "didactic" method of presentation (formal instruction or training, especially for *knowledge*).

To the present writer it appears:

- a. That as yet we have no acceptable agreed upon formulations of what educators mean by citizenship, civism, civic efficiency, good citizenship, education for citizenship, and the like. The *ex parte* pleader, and departmental specialist, tend to include all virtues, desirable traits, approved qualities, under good citizenship. But makers of programs for upper grades obviously have in mind chiefly political or "large group" qualities. Practical difficulties arise, therefore. Is training in handwriting one contribution towards good citizenship? Should we designate as "civic education" the learning of a trade? When we "instill" love of good music, are we still in the region of civic objectives? We greatly need here extensive concrete analysis of the qualities—of all kinds—which should constitute objectives of education; and agreement upon elementary classifications and terminology.
- b. That in all programs of civic education (in the limited sense) that we now use, mechanistic aspects of social, including political, economic and governmental, action are overstressed; while function aspects, especially those comprehensible to the learner, receive insufficient attention. The analogy to methods of teaching of anatomy and physiology in former years will occur.
- c. That our pedagogic ideals of method give prominent place to "activities" in civics teaching; but these are still chiefly "pole-star" ideals, the "lighthouse" ideals being largely non-existent as yet. Hence our actual objectives take the form chiefly of the more or less forceful impartation of knowledge—facts, generalizations, dogmas, logically arranged. But it is questionable whether even very skillful teachers can make these "didactic" methods more than partially effective towards functioning standards and habits of later civic behavior.
- d. That we seriously underestimate the inventiveness, amounting often to great talent, required to make "activity" methods—projects, self-government, coöperative undertakings, public service supervision,—give persistent results.
- e. That we have seriously disregarded and undervalued the suggestive possibilities for method, of numerous procedures that, outside the school, are now actively functional in producing some kinds of civic virtues, often without the intervention of any conscious educational intent. At one extreme of this type

is scouting; at the other the stories, movies, and gang operations craved and sought by youth.

- f. That it is especially important for us to examine the possibilities, as means of certain forms of civic education, for specified groups and towards specified ends, of various history studies, especially in the two types of situations when: (1) the teacher is of average interpreting and inspirational power (for that field) and the objective history content is regarded as important; and (2) the teacher is expected to be of exceptional power and the history content a relative minor means. It is suggested that probably all current thinking greatly overvalues history as a means of social education, except for the rare spirits who early develop exceptional constructive social imagination.
- g. And finally, that when we get to the stage of experimental procedure in all these fields we shall find ourselves forced to proceed through detailed consideration of clearly delimited case groups and by means of provisional objectives of the most concrete character.

CHAPTER XXXIII

GEOGRAPHY

1. The *aims* or *objectives* of geography have in recent writings been stated chiefly by geographers—hence over-idealized, sometimes Utopian, and nearly always in disproportionate relation to other aims. Confusion also results from ease with which it can be made to appear that geography should or could be made correlation core of natural science, social science, history, vocational guidance. Existing text-books as *measures* or *guides* to purpose are probably overloaded, over detailed, lacking in differentiation of objectives. Materials offered in them are rich, varied, alluring—but purposes of prescribed learning nowhere so defined as to assist pupil or teacher in selecting individual programs or even in discovering what ends to pursue with definiteness and expectation of acquisitions of knowledge, skills, appreciations, that will persist.

2. The *vocational* objectives of geography are highly specialized; therefore no attempt should probably be made to realize them in elementary and junior schools. Pre-vocational units could perhaps be defined as electives in high schools and colleges; but in the main offerings should be confined to vocational schools. Schools of navigation obviously require a highly developed technique of map use as well as command of general knowledge. Schools of farming require meteorology, often included as a topic in geography (instead of physics where it more logically belongs); a few selections from physiography (erosion, denudation, sub-surface water movements, etc.); and probably *appreciations* of regional specialization in farm production, transportation and consumption. It is vaguely held that all or some types of commercial schools should teach commercial geography; but the actual objectives of this, or rather the validity of objectives now held, are very doubtful.

3. Possible objectives of geography for *social* education are few but probably important. (a) For purposes of liberalizing and rendering socially constructive appreciations of our own variegated racial membership, social geographic backgrounds of England, Italy, Russia, Japan, Ireland, Germany, American Indians, negroes, etc., can be studied to advantage. (b) Towards promotion of international harmonies, appreciation studies of economic, governmental cultural qualities of rivaling and other peoples are readily practicable. (c) Certain larger international problems of citizenship—territorial specialization of production, migration of peoples, tariffs, international payments in gold, acculturation, sanitation, etc.—require background or basic knowledge that is essentially geographic. (d) Similarly certain large problems of *national* and *state* citizenship—localization of

production, urbanization of populations, development of means of transportation, racial or caste segregation, conservation of natural resources, large scale sanitation, etc.—have their strongly geographic aspects which in some cases might be reached through studies of *civic* problems, in other cases prepared for by topical selection and emphasis (if purposive) in geography.

4. But principal objectives of geography doubtless belong under *cultural* education. Include hereunder satisfaction of natural curiosities, general knowledge for adult use. Certain facts of geography should be learned for travel, etc.

Problem of first importance here is to distinguish alpha and beta objectives. Reading a good book of travel is cultural, but may leave no exact knowledge for adult use. Certain facts of geography should be learned so as to be as readily employed in adult life as the multiplication table. "Moving picture" geography is illuminating and for the moment informative—but its results do not usually abide. Within limits yet to be defined each person supposed to have an eighth grade education should be able to read maps, "run down" facts in gazetteer, make geographical inferences. How shall we give qualitative or quantitative definition to these objectives? Some of the specific problems are indicated when we try to determine: (a) What types and degrees of beta geography we should provide children under fourteen, normally completing eighth grade at that age—in expectation that only vaguest results will be visible at age thirty; or (b) what systematic instruction and training we should give in first eight grades in expectation of definite results in memorized knowledge, ready skills (e.g., map reading, inference) or well established generalizations at age thirty. More specifically, for example, having always in mind product of eight grades schooling only:

- a. What should be expected definite knowledge (at age 30) of South America as to: names and salient facts of principal countries; capital cities; seaports; mountain ranges; exports; local economic developments; causes of climatic peculiarities of upper Amazon, Terra del Fuego, Peruvian seacoast, historical reasons for population peculiarities of Uruguay, Paraguay, Chile, Argentina; social effects of specialized export production of Brazil, Venezuela, Chile.
- b. As fairly definite residual knowledge products of geographical studies what should men of average (eighth grade) schooling at age thirty possess as to: significant social characteristics of Kaffirs, Turks, people now of Hawaii, Scotch; significant natural resources of Siberia, Italy, New Zealand, South Africa, Michigan; significant commodity exchanges between England and Ireland, Argentine and United States, Japan and South America, Egypt and France; probable economic and military significance in future of Niger, Panama Canal, Mexican oil fields, Cuban sugar, Chinese coal, Magdalena Bay; essential climate factors

in Sahara, Nile, Amazon, Steppes, Palestine, Utah, British Columbia, Upper Zambesi.

- c. For same standards of culture, what expectations of definite knowledge should be expected of a Lowell, Massachusetts, man as to: rivers of Arizona, products of Idaho; social groupings of Georgia; climatic features of Washington; economic specializations of Wisconsin; cultural attainments of California?
 - d. How shall we define kinds and degrees of "beta" influences to which we should try to "expose" average learners within first eight grades as to: China; Switzerland; The Bermudas; Alaska. Differentiate for: books of travel; books of general or specialized (export, social, travel, historic) description; moving pictures; novels with local "atmosphere"; photographs; oral accounts from visitors or native born? What should be standards of flexibility, of election within such fields?
5. The following provisional theses are submitted for examination:
- a. Objectives in geography for the first four grades should be of beta types only, with emphasis on local geography, wonder stories, "human interest" stories (e.g., Jane Andrews' *Ten Boys*), pictures (moving where practicable), simple map construction from local data of experience, map reading, etc.
 - b. For grades five to eight inclusive one hundred hours per year should be given to beta geography, with very considerable latitude allowed to learners as to choice of readings, excursions, map-making and map reading exercises, attendance on moving pictures, etc. Portions of this "work" can be had outside of school hours.
 - c. From fifty to one hundred hours yearly should be given in same grades to alpha geography, based on clearly defined objectives partly of memorized knowledge, partly of skills of map interpretation and location finding, and partly on powers of generalization. (These objectives cannot be defined by geographers alone—their specialized interests inevitably prevent correct perspective. A committee representing different points of view, and especially that of the *total* curriculum for the grade considered, is essential.)
 - d. The present *type* of text book is unservicable. Ideally there should be available: (1) a teacher's manual or guide for the subject; (2) a "five foot shelf" (at least) of beta class materials for pupils' use; (3) a compact little text (possibly two, one for grades five and six, another for grades seven or eight) defining and exhibiting alpha objectives for pupils.
 - e. Any complete correlation in methods of attaining objectives of geography with those of history, natural science, etc., is impracticable. But where alpha or even beta objectives are defined, methods of attaining them may include incorporation of mater-

ials from other fields as method of enrichment, vitalization (but note that this rarely values attainment of objectives of the subjects correlated to geography).

- f. High school and liberal arts college curriculums where considerable flexibility is practicable can well offer elective advanced courses in geography of various types. For pupils of geographic interests these would prove of almost unsurpassed cultural and, occasionally, social and prevocational possibilities.

CHAPTER XXXIV

THE FINE ARTS

1. The term "fine arts" is here used in contradistinction to useful arts—or practical arts—and, in broadest sense, includes: painting, sculpture, decorative architecture, material decoration, photography, (graphic and plastic arts, using harmonies of form and color and appealing directly to the eye); song, instrumental music (musical arts, using harmonies of sound appealing directly to the ear); epic, lyric, essay, novel (literature appealing to imagination); and dance, drama, opera, cinema, oration, and other "art composites."

- a. The primary appeal of the fine arts is to the "aesthetic sensibilities." Man's equipment of instincts includes many readi-nesses or predispositions to respond to particular forms of aesthetic appeal (to "feeling," emotional nature," "sentiments," etc.) Note varieties of appeal made by music; contrast with "appeals to understanding" (intelligence, scientific imagination, knowl-ledge) made by various forms of science, record of facts, etc. Also note that man's "sense of the useful"—in dwellings, high-ways, implements, clothing, printed record, speech, body move-ment and carriage (and also foods, odorous objects, sex re-lations, etc.) is often at war with his sense of the "beautiful," "tasteful," "aesthetic." Note efforts of most socialized artists to reconcile (or rather find optimum resultants) in archi-tecture, furniture, fabrics, dress as body decoration, food service, sex relations, public speaking, printed matter, etc. (Remark attitudes towards the "ornate," "flowery," "perfumed"; also "ginger-bread architecture," "florid oratory," "sentimentality.")
- b. Probably appeals made by fine arts have had "survival" values in past for individual and for society—in favoring sexual se-lection (still in evidence among animals), mutual aid (in work, war, maintenance of order), social sympathy (family, worship, amalgamation), transmission of social inheritance (tradition, legend, social ideal), making acceptable knowledge ideals. Thus resulted reciprocal development of "capacities for response" (in-stincts of taste, appreciation, "emotion") and means of arousing or awakening such states (harmonies of form and color, odors, tastes, in plants; same, to which add harmonies of sound and motion, in animals; add, for humans, numerous appeals to mem-ory, imagination, intelligence).
- c. Note that aesthetic appeals to sight, hearing, imagination and

understanding represent only so-called "higher" aesthetic responses. Of no less sociological importance are aesthetic responses to taste (gustatory senses), odor (olfactory senses), and touch (tactile senses). Even yet large range of keen aesthetic responses may easily be evoked along these lines by foods and drinks, perfumes and other odoriferous articles, objects smooth or otherwise to touch. Now generally esteemed vulgar to use more than slightly and delicately these appeals to "appetites"—food, drink, bodily comfort, sex.

- d. Probability that in all fundamental activities of social life, utilization of aesthetic appeals (as historically known) steadily gives way to "intelligence" appeals—calculation, tested formula, reasoned action, unemotional deliberation (in a word, "science," as against "art"). This clearly true in fields of olfactory and gustatory appeals; probably true in tactile appeals, and those evoked by terpsichorean arts; apparently true in cruder appeals to auditory, visual and imaginative capacities. Trace diminishing place of art in work, worship, mating, war; in making fundamental appeals for order, self-development, co-operation, adequate parenthood, thrift.
- e. But equipment of instincts of aesthetic response still persists. In some cases, substantial atrophy without injury possible (smell, taste, tactile sense) although morbid manifestations frequent. In other cases, use of these appeals to "spice" life, to supplement prosaic "drab" activities possible. Note use of music, light literature, bodily decoration, dancing, drama, certain forms of painting, architecture and sculpture for these "diversion," "recreation," "pleasure-giving" functions—and cant about "art for art's sake," "pleasure (or happiness) as an important end in life," etc. Note also strong tendency of devotees (producers and utilizers of these vestigial art functions) to become (or, by selection, to be) freakish, immoral, degenerate (aesthetes, feminine men, masculine women, sex perverts, epicures, mystics, impracticals, dreamers, visionaries, charlatans). Note also large intermingling of decadent forms of art sensibility in socially pathologic areas—Bohemias, red-light districts, "conspicuous consumption" (rich or near rich), hotels and restaurants catering to epicurean tastes in food, drink, dancing and sex, theatres, "beauty parlors," places of religious revival or esoteric worship, etc.

2. Functioning applications of fine arts in modern social life meeting tests of being dynamic and democratic, are at least three: (a) art for diversion, recreation after specialized toil, soothing of tired nerves, etc.,—popular music, moving pictures, dancing (in a degree), long and short stories, light drama, illustration; (b) art applied to objects of utility to enhance agreeable associations—"good" speech, "artistic" writing (of facts

or imaginings), "graceful" carriage, "well-designed" (aesthetic, as distinguished from utilitarian, design) tools, implements, books, cars, buildings, roadways, table-ware, clothes, etc.; and (c) art applied in display advertising publicity, where attention must be "taken captive"—even through the emotions.

- a. Actual social values of these still doubtful. First easily leads to excessive, degenerative, morbid forms, second tendency often leads to subordination of utility to beauty—bodily decoration, architecture. Display advertising probably now source of enormous social waste.
 - b. Problems as to other social uses of art for contemporary society. Can it be used to elevate moral and social ideals—through song, drama, novel, moving picture? to "enrich" life—whatever that may mean? to promote general social understanding? to perfect the family? to increase diffusion of serviceable knowledge? To answer questions of this sort we need more knowledge than is yet available both of psychology and of sociology.
 - c. It is possible that, apart from all general social considerations, certain stimulation and development of art-appreciation capacities essential to wholesomeness. (Theory that vestigial or suppressed instincts become centers of "decay"—cf. Freud, Jung.) Question as to how far systematic art education may be necessary to preserve wholesomeness.
 - d. Are the following fine arts obsolescent: sculpture, poetry, serious drama, oratory, dancing, music of worship, painting, architecture (as a primary rather than subordinate decorative element)? Answer in terms of: appeal to democratic majorities; appeal to few who ultimately influence and direct many, etc.
3. Probably important functions of school education in art fields where utilization is dynamic and popular are:
- a. So to direct such utilization as to lessen anti-social consequences—immoral fiction, sensual music, demoralizing moving pictures, lascivious dancing, etc.
 - b. To insure as far as practicable that "applied art" shall not displace or distort basal utilities in dress, furniture, books, communication, etc.
 - c. To keep within reasonable social bounds competitive outlay on display advertising.
 - d. Where practicable, to use art to elevate ideals and social sentiments (perhaps literature only).
4. Is it desirable to use school education to revive extended appreciation of obsolescent forms of art—folk-song, folk-dancing, painting, "art" or "expression" dancing, monumental architecture, epic, lyric, etc.?

At suitable times, these inhistoric products, may well be studied as "history"—but that has no substantial connection with art appreciation.

5. Objectives of school education in art appreciation suggested above should all fall within "beta" class—hence freedom of election, methods designed to give appreciation, amateur execution, etc.

6. Persons showing talent as potential producers of socially valuable art (not yet clear what that is) should be given early encouragement and support to specialize as high grade producers. Specialized vocational schools desirable for these.

CHAPTER XXXV

ENGLISH LITERATURE

1. English literature is now generally regarded as the most important "cultural" subject in public schools; but its actual objectives are not established. The following facts are important for perspective:

- a. Literary selections have always been used in elementary schools in connection with teaching of "reading." In days when reading matter was scarce the ablest and most imaginative pupils often developed genuine literary appreciations for this fragmentary but choice material.
- b. Until recently American secondary schools did not seek to teach "literature." But for many years they aimed to teach (a) the history of literature and (b) the mechanics of literature. (Even yet many English schoolmen insist that "literature cannot be taught.") The history of English literature has usually followed the chronological order and has included (a) biographical data of writers, (b) extracts from best known works and, sometimes, (c) contemporary influences. "From Milton to Tennyson" is a type. Recent tendencies have been towards diminishing numbers of writers "to be learned" and lengthening representative selections. The mechanics of literature has been taught as rhetoric, sometimes as advanced composition.
- c. During last twenty-five years signal advances have been made in extending supplementary reading, library reading, magazine reading, etc., in upper grades. Libraries and schools have evolved extensive lists of "suitable" books, some classic, some recent, suited to various ages. Results certainly suggest successful "teaching of literature" of one kind—the formation of reading interests and, perhaps, tastes.
- d. During same period joint committees on college entrance standards have programmed courses in literature for high schools, first apparently as common basis for tests in composition and rhetoric but latterly, apparently, for something more ambitious. Selections recommended still reflect preoccupations with the "historic survey," and "knowing something" of leading authors. But vague realization of needs of new objectives is apparent, especially in books and articles for teachers.

2. Why should time and money of public schools be used in "teaching literature"? Sociologically valid replies to this query are still wanting. These considerations are important:

- a. Strong instinctive desires exist in all for stories, legends, fables, songs, speeches. Orally communicated literature has doubtless existed for many hundreds of centuries and interests in it have been communicated universally by usual channels of social imitation.
- b. When once mechanics of reading have been fairly well mastered strong interests in certain types of fiction and some other reading developed without further aid of schools. Note vogue of novel, short story, fiction-filled magazine, newspaper reports of court proceedings. Recall efforts of librarians to keep "boys" in France supplied with reading matter. Interpret facts as to "best sellers," *Saturday Evening Post*, *Robinson Crusoe*, the "five foot shelf," Dickens, Scott, Longfellow, popular afternoon newspapers. Study the sales counter of a railway station.
- c. Example, suggestive and purposive teaching, skillfully applied, can shift, develop, and "elevate" reading interests. Certain agencies of by-education—home companionship, library, newspaper, stage—do this constantly now. Teachers can aid, especially towards types or examples not made familiar by social suggestion.
- d. Is the function of the school, then, chiefly to "lead on" the reader with tastes already partly evolved, to new and "higher" appreciations, interests, insights? Many of us now approve these purposes "on faith." But we need something more than "faith objectives." These have not guided us well as to standards and real values. They cause us to impose our pedantic, "high brow" standards, or to spend time chiefly in anatomical study of classics.

3. Quest for valid objectives in teaching literature in schools and towards influencing writers, press, stage, home and libraries at once encounters problems of definition. What is literature?

- a. For practical purposes we might include substantially all reading matter that is not informative reports (news, technical history, science) and vocational information. We should therefore include orally told stories; all of current fiction, popular description, and even popular (non-technical) science and history. *St. Nicholas*, the Sunday supplements, *Mother Goose*, the Rollo, Alcott, and Coffin Series, as well as the photodrama would thus have a place in programs of teaching literature—if only in place of departure.
- b. In school education, certainly, no useful purpose could be served by restricting the term as "artists desire." This would mean

imposition of "high brow" adult standards, perpetuation of mediaeval aristocratic ideals as to "exclusive" learning. It tends to undue worship of the past, of the pursuit of "art for its own sake" (always a false sociological lead, and only helpful to sustain immature aspirants through a period of uncontaminated and apparently disinterested effort).

- c. Ultimate definitions should be based upon "social functionings," not on principles of structure. "Literature is what literature does." Instinct and experience give rise to cravings for content—information, interpretations, emotions, sensations. When the materials suitable to produce these are presented with some regard to *form* we have the "functioning" effects of literature. But genuine interests vary greatly—often because of "original nature," apparently, and often because of effects of environment. Only a few can be genuinely interested in the literature that is old and hence must use imagery alien to contemporary life. A few situations of course—courtship, individual combat, contests with nature, personal religious experiences—exhibit a kind of unchangeableness; while the uncritical mind of childhood seldom seeks realistic elements in fable and fairy tale. But in the main popular requirements call for certain types of realism in content. In a sense not always understood by pedants popular demand is for literature that "interprets life"—especially the life that is a bit more significant, fruitful, free, attractive than our own. This the content: and the setting gives the form. We could advantageously press analogy with food. We need and demand nourishment—this is the content; and we desire attractive service—this is the form.

4. Problems of "social purposes" or "functioning" of literature in society generally require solution before possible uses in education can be defined. Some of these problems are the same as those of "fine arts" in general. Others are peculiar to literature because of its accessibility (in recent centuries especially) and its relatively small employment of the senses (compared with other "fine arts").

- a. From standpoint of producer, literature is often included in concept, "art for art's sake." Were Homer, Euripides, Juvenal, the writers of Job and Ecclesiastes, Plutarch, Dante, Milton, Bunyan, Pope, Tennyson, Dickens, Whittier, Lowell, Whitman, Kipling, Wells, Oliver Schreiner, Tolstoi, Shaw, Zane Grey, H. B. Wright, Serviss, Masters, animated by "social purposes"? What of Sappho, Virgil, Horace, Tasso, Chaucer, Shakespeare, Addison, Byron, Keats, Swinburne, Poe, Wilde, Henry James, Amy Lowell?
- b. What do "the people" get from "great" literature? pleasure? ideals? vision? common standards and sentiments? substitutes for experience? Analyze some customary hypotheses.

- c. What do "the people" get from popular (and often fugitive) literature—fiction, short story, ephemeral poetry, magazine article? low standards? democratic ideals? pleasure? widened comprehension? satisfaction of emotional longings? Why do we sometimes say such literature is demoralizing? Under what conditions is it elevating? How effective is (or could be) censorship in "improving" this literature?
 - d. What are essential characteristics of "literature" to which large numbers of children 2 to 5 (to whom orally presented) "take naturally" (even "eagerly and hungrily")? Children from 6 to 10? from 11 to 14 (boys)? from 11 to 14 (girls)? 15 to 18 (boys of superior economic rank)? Do. (of low economic rank)? 15 to 18 (girls of superior home environment)? Do. (of poor environment)?
 - e. How successful have schools and colleges been in developing enduring interests in classic literature? Were these classics written for younger readers? (Examples? Did educated youths "take" to them when they were fresh? What "classic" literature still has natural fascination for childhood? adolescent youth?
 - f. For the effective "functioning" of literature (in any specified way) is a degree of contemporaneity essential? Is it easy or even practicable for us to-day to apperceive or apprehend the "milieu" of Sophocles? Caesar? Tasso? Dryden? Wordsworth? Cooper? Consider separately as regards: (a) mating love; (b) war; (c) man's knowledge of the world and universe; (d) man's belief in, and attempted intercourse with unseen personalities (religion); (e) prevailing ideals of democracy; (f) control of natural forces; (g) fatalistic convictions; (h) other large social and personal elements.
 - g. Is human nature "always the same"? To what extent have abolition of slavery, spread of scientific knowledge, development of complex mechanisms in war, development of trade unions, employment of capital, science and invention in production, rising standards of living, mobility of labor, rational control of sex morals, and "placing the gods far beyond Olympus," made it difficult to respond to old literature (except on part of cults devoted to the antique, or followers of the illusion of the "Golden Age behind")? To what extent do these entail requirement of contemporaneity as a condition for many kinds of "functioning" of literature?
5. Problems of elevating native interests in literature as a "mental play," or "intellectual nurture" agency appear when we recognise naturalness, universality, and developmental character of these spontaneous interests.
- a. All children manifest intellectual hunger for stories, orally presented. Almost all will continue this interest in printed pre-

sentations, if mechanics of silent reading are mastered sufficiently well and early (cf. popularity of cheap fiction, popular journals, etc.). Standards of production will rise with improvement of demand. Note economical character of this form of "beta" education. Means found in schoolroom reading, school libraries for home reading, circulating libraries, public libraries. Harmful effects of adult "goody" standards, and of artificial "art" standards. "Reading aloud" by teachers as important prelude to self-motivated silent reading even in case of older pupils being initiated on higher levels. (Can teachers generally read aloud well?)

6. Literature obviously very potent in producing ideals, attitudes, appreciations, valuations, standards, sentiments, aspirations. Hence, very potent in character formation, and in impelling to action involving feeling elements. Problems of purpose: to what specific ends can it be used? Problems of means: what literature can be used? Problems of method: how must it be used?

- a. For pragmatic purposes in social education (formation of social character, inspiring to social action) literature must be of vital, holding interest. "Forcible feeding" of little avail. Literary analysis, searching for moral, anatomical study of literary cadavers (as apperceived by learners) doubtless bad—the intrusion of adult and pedantic standards.
- b. But for realization of definite objectives in social education (e.g., humane treatment of animals, the "square deal" in business relations, sexual continence, subjection of crude combative instincts, patriotism (a very vague end), keeping "physically fit," respecting the aged, honest voting, efficient use of time, playing a "fair game," keeping one's word, the "successful life," (not "quitting," etc.) doubtless useful literature can be found. But probably it must be used impersonally, individual learner must not be made self-conscious, certain privacies must be respected. "Goody" good teachers cannot promote this cultivation—they are too prone to violate privacies, to pull up sprouting plants for open air inspection. Art of attaining these ends probably one of most difficult in education.

7. Problems of relating literature to vernacular language very confusing. Use of term "English" without qualification, bad. Doubtful if any close connection ought to exist between vernacular language and vernacular literature studies—purposes not merely unlike, but very remote from each other.

- a. Literature will doubtless be used in language study—mechanics of reading, spelling, composition, vocabulary building, voice training, silent reading, grammar, rhetoric, etc.—but not to real ends of education through literature; in fact, literature so used is spoiled for those purposes. Literature is an *appreciation* study

—language mostly a series of specified *power* objectives (capacities to do work).

- b. Probable that language studies, aiming towards specific powers (of execution) should be carried on through vital, vigorously held thought (ideas, feelings) content of learners, rather than through weakly apprehended, second-hand content of literature. (cf. Bad effects of imitating styles, of communicating second-hand ideas—affected culture, etc.) Capacities to appreciate far outrun powers of expression, communication. Literature suitable to third grade might be used for sixth grade language; literature apprehended at 14 might be used as language “cadavers” at 18.

8. Study of “history of literature,” “evolution of literature,” etc., belongs under social science studies (which see).

CHAPTER XXXVI

PRACTICAL ARTS

1. "Practical Arts" here include all activities derived from productive activities of adults and adapted to schools for purposes of *general* education.

- a. Possible objectives in general education include: satisfaction of instincts for construction, manipulative execution, use of tools, fabrication of objects of play, etc. (forms of growth through play, amateur participation); instruction and training in standards of utilization (man as consumer, taste, appreciation, insight, socialized utilization); vocation guidance (through sampling of materials, standards, and processes of calling); socialization through development of appreciation of activities of other social classes—city boys' gardening, farm boys' weaving of consumers equipment—house repair (plumbing painting, electric work, concrete, lock repair, etc.), personal clothing, amateur cooking, nursing, etc.
- b. Activities based upon adult productive work introduced into schools to train future workers are vocational. Practical arts education rarely has discernible vocational outcome.
- c. Attempts to combine vocational education and liberal education through practical arts probably defeat ends of both. Desirable pedagogical methods fundamentally unlike.
- d. Should "practical arts" be always a beta subject?—vocational education always an alpha subject?

2. For convenience we may classify practical arts subjects as follows:

- a. Agricultural arts: home gardening; treeplanting and nursing; poultry raising; food packing; "corn club" work; pig clubs; milking, butter and cheese making; fruit drying; farm products marketing; farm mechanics; etc.
- b. Industrial arts; cloth weaving; house repair and building; house painting; installation of screens, drainage, water supply, electric bells, electric lighting, central heating; machine dissection and reassembly (sewing machines, guns, lawn mowers, stoves, pumps, bicycles, motors, optical instruments, vacuum cleaners, washing machines, lathes, etc.); bookbinding; printing; photography; wall papering and decoration; fabrication of play-

ground apparatus; furniture making; tool sharpening; wall building; road construction; boat building; photomounting; engraving; mechanical draughting; pottery and glass making; shoe repairing; tailoring and clothing repair; and scores of others.

- c. Commercial arts: typewriting; business penmanship, arithmetic, documents, English; display advertising; selling; bookkeeping; package making; comptometer; filing; banking; telegraphy; dictaphone; etc.
- d. Household arts: kitchen cooking; camp cooking, food cooking, food buying; food serving; house planning; toy house construction; home (or room) decoration; furniture choosing, distributing, upkeep; bed-making; repair (or upkeep) of apparatus for plumbing, heating, lighting, cleaning, ventilating, screening, cooking, sewing, infant nursing (feeding, cleaning, dressing, exercising); sick nursing; decorative window and yard gardening; clothing buying, making, repairing; accounting; entertaining; festivals; and many others.
- e. Nautical arts: fishing; fish planting; boat making; boat sailing; etc.

3. Fundamental principles affecting objectives:

- a. The amateur spirit must dominate. Rarely should there be prescription. Exclusion from participation should attend failure to show and sustain true amateur and progressive spirit. Flexibility of offerings should be as great as administrative facilities will permit. Much reading, illustration, etc., should illumine work. Natural interests should control selection of enterprises.
- b. Offerings (so named when presented or suggested by school; may be called "enterprises" from standpoint of learners) should take form of concrete, objective units, each fully described by printed matter, pictures, models, etc. These units (enterprises) should approximate ascertained scope, length, for preservation of interest, suggestion of accomplishment. Minimum time, for learners 12-14 perhaps one hour; maximum, sixty hours.
- c. Enterprises will be of several kinds: school execution projects; home execution projects; reading and report projects; cases (for investigation and oral report); topics (for reading and study); problems (for solution).
- d. Some enterprises may be coöperative; others, individual.
- e. Does the subject "belong" to schools after 16 years of age?

4. Of the "subjects" named under (2) which would probably somewhat "function" (A) for the boys of a high grade suburban environment and (B) for the boys of an inferior manual working class environment in

these directions: (a) vocational guidance; (b) "handy man" and useful vocations; (c) education in utilization (consumers) including "cultural appreciations"; (d) correlation centers for other subject matter; and (e) enriching experience (development)?

5. Given junior high school in prosperous commercial city with few poor or immigrant families. Five hundred girls, 400 up to grade and 100 retarded. "Home making" economics is offered in high school, and also to wage-earning young women and to housewives. Girls live at home; share lightly in home work in school time, and considerably during vacations. Most of them will become wage-earners at 16-18, except twenty per cent who will go to college. Present interests in home and household work low.

Assume means available to provide practical arts work (except commercial) analogous to that proposed above for boys. Assume expectations that vocational aims will be met later and that chief purpose here will be "liberalizing." Assume freedom of girls to elect from offerings above for boys, and also from generous program of household arts offerings. Give, on lines suggested below (A) your present carefully analyzed opinions and (B) your suggestions for needed investigations.

- a. What do you assume to be available "instincts" or interests that could be discovered for practical arts work?
- b. Would lines suggested for boys be freely elected? Would results and effects be similar to those accruing to boys?
- c. What would you set up as a series of specified "liberalizing" objectives in household arts? Cover wide range including: historical readings about homes and household processes; readings, pictures and visits to such "variant" homes or functions as hotels, asylums, barracks, bakeries, creameries, furniture factories, hospitals, power laundries; sampling projects of the ways "other people do"; amateur analysis of soap, water, foods, fabrics; "coöperative projects" (between home and school) as to meal preparation, room care, child care, adult sociability, clothing repair, accounting, home management, sick nursing; coöperative amateur projects in school and community—visiting poor, providing entertainment, school cafeteria service, school entertainments, dances, etc.; technical studies of home economics science.
- d. Following suggestion from (4) above what would you plan as needed equipment, programs, teaching service, budget provision, etc.?

6. Work out detailed scheme for "commercial practical arts," on basis of grades seven and eight in junior high school, some vocational courses to begin at end of grade eight, and more advanced at end of grade ten.

PROBLEMS

7. Given large junior high school (7th and 8th grades, and all retarded pupils over 12 years of age) with 600 boys. School session eight hours daily, of which three hours may normally be devoted to physical sports and practical arts. Previous experience suggests that, given good program and facilities, 400 of these boys, including all retarded, will elect from one to two hours daily of gardening and shop practical arts. Rest prefer either "commercial arts" or sports exclusively.

Facilities available are as follows: (a) For gardening (usually about 150 boys) home yards in 100 cases, and rented five acres (fenced) suitable for individual gardens for 50. School has reading room and small laboratory and tool house (2×25). (b) For shop work. About 100 boys live in owned houses with yards, rest in rented houses or flats (chiefly latter). School provides one large "factory type" room, 50×80 with partitioned alcoves for tool storage, photography, gluing room, etc., besides mezzanine space 160×10 for exhibits, museum species, book shelves, etc. Electric power is provided for individual driven machines, and at present there are available the following power driven machines: two small wood turning lathes, one hand saw, one plane, one circular saw, one emery grinder, one large grind stone, one medium metal turning lathe, one power press. An inadequate supply of tools and materials for the following are available; wood-working, beaten brass working, forging, semi-precious metal working, job printing, photography, electric wiring, automobile repair, vulcanizing, shoe repairing, rug weaving, tool sharpening. No satisfactory "course of study" exists. You are asked (A) to express detailed opinions as to following and (B) to indicate needed investigations to provide further knowledge.

- a. Should a minimum of practical arts be "prescribed" for all boys in this school? Why? What kinds? What amounts?
- b. If left elective, what should be primary objective (one in each case) and what secondary objectives (several possibly) that should control character of offering?
- c. Would you try to preserve "class" organization, or leave work to "individual" takings, (as now in home garden)?
- d. Would you enforce any "order" in which "subjects"—e.g., wood-working, printing, gardening, semi-precious metal working, etc., should be taken up? Why? Would you require all boys to take all subjects? (Compare with games on playgrounds, badge activities in scouting, etc).
- e. Give examples of suitable teaching units (topics, exercises, problems, projects, models, as you see fit) under these heads: printing, woodworking, photography, wireless, housewiring, shoe repair, forging, painting, steel turning, home gardening.
- f. Give suitable units that might respectively "function" as: exercises; individual productive work for home or gift; same for

self; same for schools; same for town; group productive work for school; same for one home; same for town.

- g.* Back of certain selected types of work indicate kinds of examples, pictures, printed descriptions you would desire to have for suggestiveness if you could.
- h.* Back of certain selected types of work indicate the kinds of equipment you would desire if it could be had.
- i.* Selecting one type of work—woodworking, for example—indicate how far you would desire that: (1) there be available for each pupil electing it, printed lists of suitable projects, printed booklets, illustrated by drawings, or details for each project, and exhibits of commercial and amateur work, from which pupil would be expected to procure nearly all necessary guidance, the teacher serving chiefly in consultative capacity; (2) the work of each pupil could be individual; and (3) each pupil obtain as much suggestion as practicable from others.
- j.* Having in mind the types and amounts of work you would recommend for this school, estimate probable annual cost per pupil (400) for; ten per cent on capacity outlay; maintenance of fixed equipment; supplies; teaching service; quota of overhead administration; miscellaneous. Is it worth it?
- k.* Throughout above analysis would you give "retarded" boys same opportunities as those up to grade? Why?

CHAPTER XXXVII

AGRICULTURAL VOCATIONAL EDUCATION

1. The statistics of the agricultural vocations in 1910 were as follows:

Table showing number of persons over 10 years of age in all occupations, and in agricultural occupations. (U. S. Census 1910.)

	Male	Female
All (gainful) occupations.....	30,091,000	8,075,000
Homemakers (estimated)		20,000,000
Agriculture, forestry and animal husbandry.....	10,851,702	1,807,501
Dairy farmers	59,000	2,500
Dairy farm laborers	32,000	2,500
Farmers	5,600,000	250,000
Farm laborers	4,500,000	1,500,000
Fishermen and oystermen	68,000	500
Gardeners, florists, fruit growers, and nurserymen	130,000	8,000
Garden, greenhouse, orchard and nursery laborers	125,000	7,000
Lumbermen, raftsmen, and woodchoppers.....	150,000	77
Stock herders, drovers and feeders.....	60,000	885
Stock raisers	51,000	2,000
All others in this division.....	90,000	11,500

2. For farmers (owners, tenants) commonly and for farm laborers frequently the agricultural vocations are relatively composite, specialized. Types can be distinguished by "major lines of production" (usually for market) and minors often for home consumption and sometimes for market.

- a. Give brief "job analysis" of the majors and two minors of the following types of owning farmers: (1) dairy farmers, central New York state; (2) potato grower; (3) general farmer, Iowa type; (4) Texas cotton grower; (5) Montana wheat grower; (6) general farmer, central New Jersey type (7) Connecticut valley tobacco grower; (8) California orange grower; (9) general farmer, Willamette Valley type; (10) Long Island market gardener; (11) New Mexico range cattle grower; (12) other types, from experience of students.
- b. Describe three types of "tenant farming" of the "permanent" type (not moving towards landownership) in cotton growing, market gardening, and wheat growing.
- c. Describe three types of "transitional" tenantry (young man moving towards ownership) in North Mississippi Valley general farming. Virginia tobacco growing, and Pacific slope fruit growing.
- d. Analyze reasons why following types of farming tend towards "corporation" basis: cane sugar (Louisiana, Hawaii, Cuba),

bananas (Costa Rica), beet sugar (note modified forms with partial tenantry or even ownership), California, Colorado, Montana, apples, (Oregon, Washington), sheep (Montana), green house gardening (near large cities), garden seeds, paper pulp wood, winter vegetables (Texas, South Carolina, etc.). (Add others.)

- e. Analyze reasons why following stages in agricultural production or marketing tend towards corporation basis; sugar refining, fruit drying, fruit canning, butter and cheese making, lumber making, oyster packing, beet seed growing, cattle slaughtering, (add others).
- f. Suggest methods for "job analysis" in terms respectively of (1) manual skills, (2) related technical knowledge, (3) general vocational appreciations, and (4) managerial powers in reasonable optimum measure, of the following vocations: owning general farmer, investment \$40,000, in Northern Illinois; negress farm hand, Georgia cotton growing district; "general manager," salary \$4,800, green house florist company near Boston; live stock owning farmer, Nevada; general utility hired man, Nebraska; Hawaiian sugar plantation hand (Japanese); tenant wheat grower (large scale), Montana. (Apply others.)

3. Agricultural education has two fundamental types: (A) for purposes of general education and (B) for purposes of vocational proficiency. Latter may be (a) basic (presupposing no previous utilizable experience) or (b) extensions (experience or knowledge on which extension can be based. Furthermore, both types could primarily aim to give: (a) manual skills; (b) manual skills and immediately related technical knowledge; (c) technical knowledge chiefly; or (d) manual skills, related technical knowledge and managerial skills in known proportions.

- a. Agricultural arts (home gardening, readings, laboratory experiments, window and school gardening) can be made attractive and illuminating beta study, especially for city and village boys not being reared on farms. Especially suited to ages 10-16. The subject suffers now like household arts, from misguided efforts to make it "vocational," especially for country boys.
- b. Basic agricultural education tends towards several types; (1) for farm or village boys, ages 14 to 18, on home project basis; (2) for farm reared young men, 18-30 (in short courses or winter schools, looking especially to managerial powers; and (3) collegiate, for agricultural specialists, technical managers.
- c. Extension agricultural education takes many forms; (1) short course, chiefly lectures and laboratory, for experienced farmers; (2) correspondence and home lecture courses.
- d..Note almost complete absence of systematized apprenticeship,

historically, in agricultural vocations; but also efficacy of "pick up" methods where children share work with parents, in pre-scientific stages (examples, Belgian, French, Chinese, Japanese, intensive gardening).

4. Probability that effective agricultural education of lower than professional grade can be conducted only on basis of initial high differentiation with progress towards composite occupations.

a. For example: at outset boy learns effectively to raise chickens, or a mixed garden; or to care for half dozen cows and their product; or to raise potatoes; or mastery of some other commercial specialty.

b. At outset all agricultural science, economics, accounting and art should center primarily in project specialty as alpha field. Supplemental general reading (general, agriculture, etc.) as sociological phase (on beta basis) should occupy clearly secondary place.

c. If general education is continued, it should be on beta basis and lie outside of working day (as music, literature, current reading) for practicing farmers.

5. Organization of agricultural department ought to be practicable in every agricultural area of 400 families. Department can be effective with one teacher and 14-20 pupils.

6. Problems.

a. Shall immediate objectives of training be the agricultural employe, the renter, or the independent farmer? Probabilities that farming will entail larger use of capital, available only to inheritors or to responsible borrowers. Possible tendencies towards intensive small area farming, and opportunities for renter.

b. Probable increase in demand for well qualified laborers—corresponding to specialists in industries and commerce. Difficulties of seasonal work.

c. Need of survey of needs and opportunities of agricultural producers as preliminary to vocational training.

7. Because objectives of agricultural education are now excessively generalized, questionable efforts are made to have "credit for college admission" given, and offerings are often warped to this end.

a. Assume practical agricultural school taking boy of 15, graduate of eighth grade, and in two years giving him practical skills and technical knowledge fitting him to be a "skilled employee" in poultry farming, and, when sufficiently mature, an independent manager; what credit for these two years would desire to have him given towards admission to: a college of liberal arts; a college of medicine; a college of agriculture?

8. Problems:

- a.** Analyze from experience five successive days work in one of the following vocations: (1) Milk producer for city, northern New York State, January; (2) "general farmer," Iowa, May; (3) raisin vineyard owner, California, August; (5) market gardener, Long Island, September. Give separate consideration to factors of manual skill, technical knowledge, and managerial function.
- b.** An agricultural school, admitting only boys from farms (ages 15-17, of at least elementary school education) trains for "home project" method. Boy A (entering) elects a poultry project. Boy B (after one year in potato project) elects dairy project, renting cows from father. Estimate optimum requirements and expectations in each case as to:
 - (1) Number of hours per year to be given to: practical productive work; related technical study; "general vocational studies."
 - (2) Financial magnitude of project—capital utilized, total receipts, net receipts, wages, profits, average earnings per day.
 - (3) Magnitude of project in terms of number of animals, land to be used, tools to be rented, etc.
 - (4) Variety of "side" or minor projects—farm mechanics, marketing, etc.

CHAPTER XXXVIII

COMMERCIAL VOCATIONAL EDUCATION

1. The statistics of the commercial vocations in 1910 were as follows:

Table showing number of persons over 10 years of age in all occupations, and in commercial occupations. (U. S. Census 1910.)

	Male	Female
All (gainful) occupations.....	30,091,000	8,075,000
Homemakers (estimated)		20,000,000
Trade	3,146,582	468,088
Bankers, brokers, and money lenders.....	103,000	2,500
Clerks in stores.....	275,000	111,500
Commercial travelers	161,000	2,500
Deliverymen	229,500	150
Insurance agents and officials.....	95,000	2,500
Laborers in coal and lumber yards, w'house, etc.	80,500	673
Real estate agents and officials.....	123,000	3,000
Retail dealers	1,128,000	67,000
Salesmen and saleswomen.....	663,500	258,000
Wholesale dealers, importers, and exporters.....	50,000	925
All others in this division.....	139,000	15,000
Clerical occupation	1,143,829	593,224
Agents, canvassers, and collectors.....	96,000	9,000
Bookkeepers, cashiers, and accountants.....	299,500	187,000
Clerks (except clerks in stores).....	598,000	123,000
Messenger, bundle, and office boys.....	97,000	11,000
Stenographers and typewriters.....	53,000	263,000

2. But in practice commercial vocations are far more specialized than appears above. "Clerks in stores" become more specialized in large cities. Drug clerks and sellers of silk hosiery have no "powers of execution" in common except derivative abstract "psychology of selling," knowledge of customers, etc., as generalized by educational mystics. The same is true of deliverymen, retail dealers, salesmen, agents, clerks and others.

- a. When actual requirements of a given vocation are studied—by job analysis—and the qualities of the present B grade workers are studied, difficulties of proving programs diminish. For example: assume discovered annual demand in large city for 100 counter saleswomen of leather goods—purses, pocket-books, etc.—each year. Study of present occupants of vocation gives sex, age of usual entry, and usual wages: job analysis shows kinds of personality, native abilities, general education, vocational knowledge and skills of the more successful. A vocational school can then readily set up standards of admission, courses of initial full-time schooling (vocational) and courses of part-time schooling plus part-time "practice" under supervision.

Similar procedures would give courses for: sellers of life insurance, drug store clerks (not pharmacists), sellers of kitchen utensils, travelling salesmen for fire arms, etc.

- b. For many commercial callings direct vocational education for upgrading—at ages 18, 22, 26, 30—probably very desirable. This field offers large number of “juvenile vocation openings”; but in many cases experience on one level does not prepare for advancement to higher levels, owing to specialization (note “help wanted” advertisements in papers, especially for girls).
- c. “Indoor” clerical work and salesmanship are rapidly becoming “women’s” (or, more properly, girls’) vocations. A small proportion of women workers remain celibate and for them advanced “upgrading” is especially necessary.

3. Historically, there has existed little organized apprenticeship for commercial callings—which are largely modern evolutions. But now many of these vocations attract no less than the professions; hence a constant striving upward from agricultural and industrial pursuits to commercial work, often less well paid (except for winners of great prizes) but more clean and “respectable.” Note apparent suitability for young women.

4. “Commercial education” has long been in the United States the most widely available form of supposedly vocational education supported at public expense. Public departments have tried to combine offerings similar to those of private “business” schools with non-classical “general” secondary education. The actual resulting vocational education has probably been weak, diluted, misleading; while even in best schools genuine vocational standards are as yet rarely defined.

- a. Nevertheless, since large numbers of young people strive towards commercial vocations, ineffective, even fraudulent, schools draw well, and “every little” of training helps. But the need is great for honest vocational commercial education.
- b. Tendencies now strong to “generalize” types of commercial education. Prospective stenographers are forced or urged to take bookkeeping, commercial geography, and a foreign language on educator’s assumption that she “might need these.” Note also curious array of studies provided because employers prize “general intelligence.” Many commercial departments still adhere to superstition that algebra is important. Many have also fallen victims to delusion that vocational studies should be accepted towards college admission.
- c. Also anti-social tendency exists to establish uniform requirements of age, general education and length of vocational courses for all commercial vocations. There are many juvenile commercial vocations, ought not “short unit” vocational courses be provided for these at 14 or 15? Is stenography normally a juvenile vocation? Are there any grounds for assuming that

persons should try to sell insurance or automobiles before 25?

- d. Note, too, absurdity of prevalent ideas as to "general vocational" subject matter. What is "business English"? What things in English should be especially well learned by: the stenographer; the telephone switchboard operator; the floorwalker; the stockbroker; the restaurant cashier? Similarly examine: "business arithmetic"; commercial law; commercial geography.

5. There is a place, especially in junior high school (ages 12-14), for "commercial arts" for general education (see that chapter). Many pupils taking this will enter commercial schools or vocations, and parents will try to derive advantages of vocational education from early courses; but "liberal" aims should be adhered to.

CHAPTER XXXIX

HOMEMAKING VOCATIONAL EDUCATION

1. The following figures give workable estimates of scope of vocational home-making in the United States.

Table showing number of persons over 15 years of age in all occupations and in homemaking occupations. (U. S. Census 1910.)

	<i>Male</i>	<i>Female</i>
All (gainful) occupations.....	30,091,000	8,075,000
Homemakers (estimated).....		20,000,000

<i>Homemakers and Homemakers' Assistants</i>	
Homemakers (estimated)	20,000,000(1)
Female servants (really homemakers' assistants).....	1,309,500(2)

- (1) U. S. Census, 1910, gives:
 Women over 15 years of age (single)..... 8,933,179
 Women over 15 years of age (married, widowed or divorced)

(2) From census division "Domestic and Personal Service."

2. In spite of frequent extra-home specialization of many lines of production, once centered in all homes—spinning, weaving, gardening, skin tanning, brewing, fruit drying, shoemaking and repair, clothing making, butchering, bread making, fruit preserving, teaching, nursing, water providing, heat providing, light providing, laundry work, etc.—homemaking still remains normally a composite vocation—the major duties of which include:

- a. Buying, preparation, and serving of food (to adults, children, infants, the sick).
- b. Buying, repair, reconstruction and construction of clothing (much for children, some for adult women, little for adult men).
- c. House care—cleaning, bedmaking, etc.
- d. Laundry.
- e. Child care—infants, school children, children at work and in college—including physical care, moral oversight, provision for sociability, adjustment of work, etc.

To the foregoing should be added minors such as: (a) household accounting; (b) adult sociability; (c) housing and furnishing (selecting, buying, adapting); (d) nursing of adult sick; and (e) care of garden and yard.

3. The relative importance (indicated by "weightings" of time, energy, etc., in operation or in training) of the foregoing will vary according to location, standard of living, income, etc.

- a. In the modern city home "making" of clothing declines in importance while child care standards rise.
- b. Among southern negroes and recent immigrants many mothers

work "outside" the home (for wages); hence standards of home care necessarily low.

- c. In rich homes the homemaker is chiefly a "manager" of workers at subdivided tasks.

4. The most difficult problem in determining objectives of vocational homemaking are these:

- a. What are the *standards* of proficiency to be sought for the different grades of homemaking, along the different lines given in (2) above?

All homemakers now cook, sew, care for children, etc.; but many do not do it with as much skill, technical knowledge, or social insight as we desire on behalf of the next generation. But it is futile to expect in followers of composite vocations (and from people of average rather than exceptional native ability) the skills and technical knowledge of specialized cooks, dressmakers, nurses, laundresses, chambermaids, kindergartners, etc. We need here accurate job analysis.

- b. When are the motives of girls probably most "ripe" for vocational homemaking? Normally a girl not working in domestic service is only incidentally concerned with homemaking until marriage. Do girls in general possess a genuine vocational interest in homemaking at 14-16 or 16-18, if they are to work in non-homemaking callings from close of school to age 22-26? And can vocational training "keep" well in "cold storage" for the person doing full time work as stenographer, salesgirl, or teacher? May not future possibilities lie chiefly with schools ministering to women just before or just after marriage?

- c. What are the actual values for vocational purposes, of the varied appreciations and minor skills in the homemaking arts acquired from birth, to e.g., fifteen by a girl living and more or less helping in a non-servant keeping home? Present practice seriously undervalues these. Take this problem: Most of the present homemakers of a given community (nearly 20,000,000 in the United States) did not have school vocational training. Using reasonable standards of rating proficiencies of those from 30 to 60 years of age in community known to you, what proportions would you grade A (excellent), B (superior), C (inferior), D (poor), respectively? How did upper two grades acquire their present proficiencies? Through many mistakes? Too slowly? What are the weakest phases of powers of lower two grades? If only 100 hours of training could have been given them between age 19-25 on what should it have best focussed?

PROBLEMS

1. Make "job analysis" of five days work of homemaker (aged 33) with normal family (four children) located: (a) on small, poor farm remote from village and railway station in Michigan; (b) in New York City apartment, rent \$1200; (c) in suburban "separate house" home, family income \$4500, Illinois City.

2. Given a suburban home of two adults and four children, ages 3 to 15. Place in parallel columns articles of wearing apparel (and usual year's cost) (a) commonly made in the family and (b) commonly bought ready made. (Include hats, shoes, umbrellas, gloves, etc.)

3. Case O. Daughter of Irish born parents, artisan father, average intelligence, graduates at 15 from elementary school, becomes clerk in department store (cotton dress goods), living at home. Wages increase from \$7 at sixteen to \$16 at 22 (1914 standards), of which she pays half at home. Expecting to marry at 23, she enters three months, full-time vocational school of homemaking (to give 56 hours weekly), with facilities for part-time practice work in own home or wage-paying home in the "West End." Problems:

- a. What should the school expect, and what test her for as to (a) appreciations, (b) skills of performance, and (c) technical knowledge?
- b. What should the school provide as central features in her program?

CHAPTER XL

INDUSTRIAL VOCATIONAL EDUCATION

1. Scope of field for industrial education.

Table showing number of persons over 10 years of age in all occupations and in industrial occupations—Group A. (U. S. Census 1910.)

	Male	Female
All (gainful) occupations.....	30,091,000	8,075,000
Homemakers (estimated)		20,000,000
Extraction of minerals.....	963,730	1,094
Coal mine operatives.....	600,500	45
Gold and silver mine operatives.....	55,400	39
Other mine operatives.....	136,000	141
Quarry operatives	81,000	45
All others in this division.....	78,000	464
Manufacturing and mechanical industries.....	8,837,901	1,820,980
Apprentices	100,000	15,500
Bakers	85,000	5,000
Blacksmiths, forgemen, and hammermen.....	240,600	31
Brick and stone masons.....	170,000	15
Builders and building contractors.....	173,500	849
Carpenters	817,000	38
Compositors, linotypers, and typesetters.....	113,500	14,000
Dressmakers and seamstresses (not in factory) ..	1,500	448,000
Electricians and electrical engineers.....	135,500	92
Engineers (stationary)	231,000	10
Firemen (except locomotive and fire department)	111,000	
Foremen and overseers (manufacturing).....	155,000	20,000
Laborers (not otherwise specified):		
Clay, glass, and stone industries.....	152,500	2,500
Food industries	75,500	6,000
General and not specified laborers.....	853,500	16,000
Helpers in building and hand trades.....	65,000	79
Lumber and furniture industries.....	313,000	4,000
Metal industries	519,000	9,000
Textile industries	71,000	16,000
All other industries.....	351,000	35,000
Machinists, millwrights, and toolmakers.....	488,000	93
Managers and superintendents (manufacturing) ..	103,000	1,500
Manufacturers and officials.....	252,000	5,000
Milliners and millinery dealers.....	5,500	122,500
Molders, founders, and casters (metal).....	121,000	117
Painters, glaziers, varnishers, enamelers, etc....	335,000	2,500
Plumbers and gas and steam fitters.....	148,000	
Semiskilled operatives (not otherwise specified):		
Cigar and tobacco factories.....	80,000	71,500
Clay, glass, and stone industries.....	79,000	9,500
Clothing industries	96,000	49,000
Food industries	52,000	36,500
Lumber and furniture industries.....	154,000	13,000
Metal industries	394,000	44,000
Printing and publishing.....	33,000	34,000
Shoe factories	122,000	59,000
Textile industries	298,000	352,000
All other industries.....	318,000	145,000
Sewers and sewing machine operators (factory) ..	60,000	213,000
Shoemakers and cobblers (not in factory).....	69,000	782
Tailors and tailoresses.....	164,000	41,000
Tinsmiths and coppermiths.....	60,000	24
All others in this division.....	669,000	10,500

Transportation	2,531,075	106,596
Brakemen	92,500	
Conductors (steam railroad).....	65,500	
Conductors (street railroad).....	57,000	
Draymen, teamsters, and expressmen	408,000	73
Foremen and overseers (railroad).....	70,000	240
Hostlers and stable hands.....	63,000	6
Laborers (railroad, steam and street).....	567,500	3,500
Laborers (road and street building and repairing).....	180,000	
Locomotive engineers	96,000	
Locomotive firemen.....	76,000	
Longshoremen and stevedores.....	63,000	44
Mail carriers	80,000	1,000
Motormen	59,000	
Switchmen, flagmen, and yardmen.....	85,000	52
Telegraph operators.....	62,000	8,000
Telephone operators	9,500	88,000
All others in this division.....	496,000	5,000

Table showing number of persons over 10 years of age in all occupations and in industrial occupations—Group B. (U. S. Census 1910.)

	Male	Female
All (gainful) occupations.....	30,091,000	8,075,000
Homemakers (estimated)		20,000,000
Domestic and personal service (except female servants).....	1,241,328	1,221,346
Barbers, hairdressers, and manicurists.....	173,000	22,000
Bartenders	101,000	250
Boarding and lodging house keepers.....	23,000	142,500
Charwomen and cleaners.....	7,000	27,000
Hotel keepers and managers.....	50,000	14,000
Housekeepers and stewards.....	16,000	173,500
Janitors and sextons.....	91,500	21,500
Laborers (domestic and professional service)....	50,000	3,000
Laundresses and laundresses (not in laundry)....	13,500	520,000
Laundry operatives	36,000	76,000
Midwives and nurses (not trained).....	16,000	117,000
Porters (except in stores).....	84,000	73
Restaurant, cafe, and lunch-room keepers.....	50,000	10,500
Saloon keepers	67,000	1,500
Servants	263,000	1,309,500*
Waiters	102,500	86,000
All others in this division.....	97,000	6,000
Public service (not elsewhere classified).....	445,733	13,558
Guards, watchmen, and doorkeepers.....	78,000	103
Laborers (public service).....	66,500	729
Officials and inspectors (city and county).....	50,000	2,500
Policemen	62,000	
Soldiers, sailors, and marines.....	77,000	
All others in this division.....	69,000	608

*Here omitted—included under homemaking.

2. Sharp distinctions essential between vocational education for specific industries and manual training or industrial arts for general education.

- a. From certain industries, particularly those retaining primitive characters (employing handicraft largely) have been taken exercises and elemental practices (together with related technical studies) for "manual," or "technical" education, for experience giving, etc. (cf. Weaving, clayworking, basketry, mounting, stenciling, in lower grades; metal work, woodworking, printing, intermediate grades; metal work, turning, pattern making, foundry, electrical work in highest (ninth to twelfth) grades.

As recent occasional developments, add: work with jewelry, pottery, house repair, concrete, painting, machine (bicycle, motor, sewing machine) repair, shoe repair, bricklaying, carpentry, power engine operation.

- b. A percentage of pupils will find vocational leads here. Readjusted industrial arts may yet serve in vocational guidance. Propose plans for such, assuming need of guidance, among twenty typical industries.

3. Problems of establishing as basis of programs of industrial education "age of efficient entrance" to each of above.

- a. Many specialized factory callings are able to use "full responsibility" workers at ages younger than 14. (Note history of textile, mining, small metal working, and food packing industries.) Examples.
- b. On the other hand, many others are open only to men and women of maturity, substantial physical development, and experience. Examples.

4. Problems of establishing character and extent of effective by-education for respective callings.

- a. Note that in productive fields not composed of severely competing units, tendency to elaborate means of vocational education in school is marked. (cf. Telephone, printing, certain specialty manufacturers.)
- b. Analyze causes for decline of apprenticeship in factory or other subdivided fields of production.

5. Problems of defining vocational efficiency—in any industrial calling in terms of: (a) skill and other specific habits that may well be "taught" by specialized school processes; (b) skill and other results in habit that can ordinarily come as by-products of long experience; (c) technical knowledge (intelligence, insight) that can best be taught either (1) in advance of, (2) concurrently with, or (3) subsequent to, "school" practice, through specialized school education; (d) technical knowledge available through school education in (1) advance of, (2) concurrently with, or (3) subsequent to, "life" (commercial) practice; (e) technical knowledge obtainable only from practical experience; (f) vocational sociology obtainable from school education; and (g) vocational sociology obtainable only from experience.

6. Above vocations require differentiation into "handicraft" trades and specialized operative pursuits—factories, mines, transportation, distance communication, specialized domestic service.

- a. Note that handicraft trades tend steadily to decline as men control natural power—steam, gas, electricity—and delegate work to machines. Handicraft work increasingly confined to "dispersed" vocations—building, personal service, and repair work.

- b. Note that peace no less than war (because of multiplying population, rising standards of consumption—quantitative no less qualitative—and unwillingness to do hard manual labor) incessantly demands “quantity production” of “standardized” goods (or parts)—bricks, lumber, shoes, cotton fabrics, canned fruits, loaves, chairs, novels, newspapers, automobiles, coal, railway coaches, lead pencils, men’s hats, childrens’ dresses, windows, underwear, candies, buttons, leather bags, hams, cereals, talking machines, furnaces, and, now, houses, ships, and streets. Farming and housekeeping demand standard processes and more power driven machines.
- c. One grade of producers become “tenders of machines,” while other become repairers: (a) locomotive engineers, chauffeurs, automatic stop loom operatives, street car motormen, coal miners, shoemakers, factory machinists, saw mill workers; (b) shoe repairers, plumbers, house carpenters, electricians, “all round mechanics.”
- d. Much of machine production can be done by girls or men of low native ability—textile-making, clock-making, typesetting (by machine), bookbinding, fruit canning, cigarette making.
- e. But also other varieties require careful training and maturity—tractor driving, machine shop work, engine firing.
- f. Highly specialized production inevitably tends towards regimentation of workers, i.e., specialization of inventive, financing, managing, supervising productive (in narrow sense), marketing functions—with places for all grades of ability and training, and, if morale is preserved, opportunities for each to reach place of maximum productiveness. “Man is tool using animal”—and the locomotive, steamship, building elevator, automatic stop loom, farm tractor, cannon, coal cutter, sawmill, printing press, automobile, telephone, sewage pipe system, dynamo and dynamite are his latest and best tools—notwithstanding the doubts of the *intelligenza* of whom academic schoolmasters are unfortunately often a part.

7. Regimented production provides numberless opportunities for advancement—up-grading—of workers as maturity, training and morale develop. But, unlike handicraft trades, the ascent is not on inclined plane, but a series of often high and difficult “steps.” Hence vocational education for higher stages can only seldom be given in adolescence—perhaps vocational guidance must be postponed also. Need of upgrade schools for most workers at ages 18-22, 26, 30, etc. Transition from wage-earning for girls to homemaking presents same conditions. Sometimes wage-earning experience is an asset—from domestic service, teaching, nursing; or perhaps not, or even a hindrance—factory, store, office. But “upgrading” work cannot well be done in evening extension schools.

8. *Methods* of industrial education determined by manipulative and specialized character of most industrial vocations. Specific objectives can be ascertained only by job analysis—first of the B grade workers now found. *Basic* industrial education almost necessarily involves large participation in productive work—which had best be on wage-earning basis. Hence need of “part-time” arrangements, especially for subdivided production involving expensive equipment. Plumbing and repair trades can be taught in school plant; but no successful examples exist of effective school plant (with genuine productive work) for coal mining, shoe manufacture, cotton cloth weaving, meatpacking, watch making, newspaper manufacture furniture making, etc.

9. *Extension* industrial education now found in many varieties in evening and correspondence schools. It succeeds largely in proportion as:

- a. It is correlated with clearly defined and differentiated vocations as now practiced, and does not involve undifferentiated subjects such as “mechanical drawing,” “shop mathematics,” “principles of electricity,” etc.
- b. It is restricted and related to parallel practical work being followed outside of school hours.
- c. It is organized on a “short course,” “amply documented” basis (booklet form preferred) for workers of average powers of foresight and imagination.

PROBLEMS

1. Make job analysis of optimum combinations of qualities now found in B grade workers of three following vocations, as respects respectively, manipulative skills, related technical knowledge, and special vocational appreciations (health, civic, cultural): baker, coal mine operator, locomotive engineer, spinner (girl 15-20), wood working mill specialists operative, streetsweeper, shoe factory foreman, saw mill manager, brick layer, shoe cobbler, drayman, mail carrier, telegraph operator (supply others).

2. From your knowledge of conditions *now* in America what are prevailing *shortages*—skills, technical knowledge, social appreciations, health appreciations—in above vocations (or others selected)? Of these which could vocational schools probably correct? Which could they probably not reach?

3. What industrial vocations are now prevailingly “women’s work?” Men’s work? In what fields are transitions taking place? Why?

4. What are estimated proportions of men and women in all industries at ages 16-20; 20-24; 24-32; 32-48? Why are women not found in coal mining, railroading, brick masonry?

5. Do women wage-earners prevailingly command as much wages as men at ages 15-18; 18-24; 24-36; 36-60? Why?

CHAPTER XLI

PROFESSIONAL EDUCATION

1. The following are the professional callings as given in the census of 1910.

Table showing number of persons over 10 years of age in all occupations, and in professional occupations. (U. S. Census 1910.)

	<i>Male</i>	<i>Female</i>
All (gainful) occupations.....	30,091,000	8,075,000
Homemakers (estimated)		20,000,000
Professional service.....	929,684	733,885
Actors	16,305	11,992
Artists, sculptors, and teachers of art.....	18,500	15,500
Civil and mining engineers and surveyors.....	59,000	5
Clergymen	117,000	685
Lawyers, judges, and justices.....	114,000	558
Musicians and teachers of music.....	55,000	84,500
Physicians and surgeons.....	142,000	9,000
Teachers	121,000	478,000
Trained nurses	6,000	76,500
All others in the division.....	280,000	57,000

2. Distinctions between "professions" and other callings are not well established. "Is teaching a profession?" a question debatable according to standards. But

- a. Direct school vocational education first developed for certain professions—medicine, law, theology, engineering, elementary school teaching.
- b. They attract and reward, usually, superior grades of ability.
- c. Old conception of close connection between professions and leadership probably of diminishing importance.
- d. Also old conception of large "unpaid service" rendered by professional men.

3. Note general insistence on extensive "general education" as preliminary to professional school study—but whether such general education actually functions or should function chiefly as (a) culture desirable in a professional man, (b) preparation for professional studies (in knowledge and in mental training), or (c) selection of the natively superior, is not yet clear, at least to educators.

4. New callings appear in modern life which are essentially professions—business administration, military leadership, journalism, public service administration. But it is difficult to define definite preparation for these callings, hence selection and self-training plays largest part in preparation.

5. For certain professions, vocational schools have hardly as yet been developed—acting, high school teaching; whilst for others schools are just evolving—journalism.

PROBLEMS

1. The largest current problem of objectives in professional education grows out of tendency towards specialization. Medicine differentiates towards surgery, dentistry, optometry, osteopathy, and also towards special service for nerves, stomach, nose and throat, etc. Law has several specialties and teaching many more. But upholders of historic order desire "general" preparation in the profession before specialization begins. Engineering education now proliferates. Shall we expect in medicine future specialists to be trained as are now dentists and optometrists—without general basis?

2. Many institutions give, not basic vocational education for professions—especially law, engineering, high school teaching—but only *technical* studies of importance in such preparation; but summer practice work is beginning of reform.

Hence still survive problems of *degrees*; shall teachers be content with A.B., B.S., A.M., Ph.D., or should they obtain degrees indicative of their professional competency in performance? Some agricultural and engineering colleges still give the B.S. for professional courses.

Prediction: that eventually every distinctive type of each profession will have its appropriate degree indicative of the tested ability of the holder to *perform*, to *do*, and not merely of *knowledge possessed*. Teacher training institutions might well give a score or more of such degrees—for the kindergarten teacher, the primary supervisor, the physical education director of elementary schools, the secondary school teacher of mathematics, etc.

CHAPTER XLII

PHYSICAL EDUCATION

1. The functions of school-controlled and school supervised education in promotion and conservation of physical well-being will include:

- a. Such instruction of one generation as may secure better heredity in the next. (An obscure field as yet—see discussions of eugenics).
- b. Such development, instruction, and training as will enable parents of next generation to provide better material environment and by-education for young.
- c. Use of school as center of suggestion and possible direction towards home and other responsible agencies to secure better material conditions for development of present generation. (Applicable chiefly to distinctly subnormal homes, and to be exerted chiefly through specialized agencies, e.g., school nurse, school physician, day nursery, care-taker, home and school visitor, etc.).
- d. Provision through school of means of nurture. (Except in case of children deprived of parents, probably of little application. School meals clearly a palliative. If public agencies must enter, then more comprehensive policy needed.)
- e. Enlistment of home in improving by-education of individual to prevent illness, promote self-development, etc. (a large field, requiring extension of functions of "health department—beyond scope now planned for school physician, school nurse, etc.). (Only a slightly practicable field for "regular" teachers—possibilities in day nursery, kindergarten, country school.)
- f. Enlistment of home and other agencies in improvement of collective means of physical well-being—playgrounds, school health supervision, sanitation, (flies, water, communicable disease, etc.).
- g. Improvement of conditions under which school activities are carried on, as these affect physical well-being. (A large field, requiring development of scientific technique and special agencies.)
- h. Provision of means, incentives and requirements for physical play. (A field with little specialized knowledge or service as yet;

control of athletics, however imperfect now, perhaps a beginning.)

- i. Provision of means and requirements for physical work. (A field now ignored, but probably of signal importance.)
- j. Positive physical training. (Various attempts made heretofore—gymnastics, calisthenics, etc.—probably of little significance. Dancing has possibilities, but belongs to play—beta—group. Corrective gymnastics, technically individualized, probably important for a small minority.)
- k. Boy Scout and other similar large activities probably of much promise. Fundamentals of military power—special powers, walking, creeping, climbing, running, wading, swimming, sleeping out, burden carrying, rifle shooting, grenade throwing, trench digging—possible of accomplishment on beta basis, using volunteer squads, leaders assigned for “short units” responsibility. Specific military exercises probably must be carried on by extra-school agencies—if under 18, at summer camps, etc.
- l. Extensive development of intellectual appreciation of ideals, principles, facts of physical development, sanitation, individual hygiene, possible through use of “beta learning” devices, as yet but imperfectly developed. Lectures (specialists in sex hygiene, etc.), moving pictures, (community sanitation), attractively presented readings (all phases) and many other means available.
- m. Possible fields for “alpha” types of instruction not yet clearly defined.

PROBLEMS

1. The specific objectives of physical education are as yet very poorly defined. The following include some important problems now requiring investigation:

- a. To what extent is it desirable or expedient that physical functions probably not to find employment in civilized adult life should be left systematically underdeveloped in youth?
- b. To what extent is physical work probably a necessity to physical development? (Note especial application to middle economic class girls—receiving chiefly intellectual education, and sharing largely in social play life.)

2. Given case of boys in hilly region where dairy farming is prevailing occupation. Streams and groves abundant. Residences average one-half mile apart. Three-fourths of boys will follow fathers' occupations, one-fourth “will work in town.” Snow falls deeply in winter, and boys do moderate amounts of fishing and hunting. Rural elementary schools average 160 days attendance per year, town high schools—to which about 40 per cent ablest pupils go for 1-2 years, and 20 per cent, 3-4 years, 180

days. From age of five onwards have chores and by ten are doing regular work with cows, home wood supply, etc.

Assume yourself asked to prepare scheme of physical education—county-wide and county supervised—for this region with possibilities of ample funds—possible maximum \$10 per year for maintenance, and \$3 for capital outlay per school pupil—what would be (A) your first judgment and (B) your plans for research into following questions:

- a. In former years have large proportions of boys of this region reached adult years in "bad" physical condition? What were probable chief causes of the "bad" physical condition? Premature physical work or overwork? Underwork? Insufficient play? Insufficient nurture? Insufficient medical care? Bad hygienic conditions in homes—what? Bad hygienic conditions in schools—what? Absence of physical training?

What proportions reached adult years in probably "good" physical condition—by standards of your expectancy as to longevity and health, or other reasonable basis? In what respects as to play, work, medical care, nurture, etc. did these differ from those rank was "bad"?

- b. In what respects are the boys of to-day coming up under conditions more favorable than their forbears? Under conditions less favorable? As far as practicable develop here (1) physical diagnosis and (2) physical prognosis for boys of this region at ages 6-9, 9-12, 12-15, 15-18, having in mind different type groups if you think these can be distinguished.

- c. Select one or more age levels, and propose programs of physical education, giving separate recognition (including estimates of cost) to following factors (add others as desired, and designate types of general or special service—resident or peripatetic—expected to be employed); (1) health inspection by physician (including dentist, oculist, etc.); (2) health supervision by nurse—school or district; (3) instruction in hygiene and sanitation; (4) general physical training—calisthenics, gymnastics, directed sports, etc.; (5) special (i.e., individually corrective), physical training; (6) supervision of physical work; (7) supervision of mental work (hygiene of school life, etc.); (8) provision of facilities for play, sports; (9) influence of nautical conditions.

3. Make corresponding study for girls in same environment.

4. Prepare corresponding studies for boys or girls of following case groups:

5. Boys of prairie agricultural region with minimum of live stock farming, of opportunities for hunting, fishing, sledding, etc.; poor local water supplies, and a prevailing scarcity of hired help for heavy farm work.

6. Girls of a crowded tenement district; mostly immigrant parents, seriously "dislocated" as to ancestral custom; home hygienic conditions

low; community sanitary conditions good as to water and sewage, bad as to garbage, parks, and sunshine, fair as to control of contagious diseases; little physical work until wage-earning at fifteen begins, then work of artificial kinds—factory for average, office or store for keenest; school attendance 180 days, much “formal” drill and long “home lessons”; school has medical supervision only to control contagious diseases, no physical training, and only weak instruction in hygiene.

7. Girls of a prosperous suburban environment; good home medical attendance; 100 days each summer in camp or country home; much social life; parents ambitious for social and intellectual success of girls; sports and even athletics popular, but real physical work taboo; school has sufficient medical inspection, favors formal calisthenics and at all stages gives good instruction in hygiene.

8. Colored boys in manual working class neighborhood (supply social diagnosis).

9. Administrative proposals.

- a. The long school day, covering both alpha and beta intellectual and physical activities—seven hours per day for pupils 6-12, eight hours for those 12-18.
- b. Discontinuance of all “home work” or home study of alpha type.
- c. Development throughout system of agencies responsible for school's share in promotion and conservation of physical well-being—such agencies to include expert medical service, but to be under pedagogic direction superior to that now by-produced from medical service.

CHAPTER XLIII

GUIDANCE

A. GENERAL

1. Guidance as a function of educational agencies may be (a) educational guidance, (b) vocational guidance, and (c) civic guidance.

a. Guidance for some or all activities and responsibilities of life is normally one product of by-education in home, shop, and miscellaneous association of club and street. It is also a by-product (often unconscious) of school education, as this gives insight, arouses ambitions, shapes ideals.

b. Contemporary demand is for guidance on scientific and purposive basis as far as practicable. (a) After period of elementary education, students confronted by variety of educational possibilities. Choice of curricula, election of courses, necessary. At present either blind tradition, caprice, or suggestion of associates largely controls. Intelligent direction is wanting. (b) Between 14 and 20 almost all youths make momentous vocational choices. Under primitive conditions where son follows father in career, or under rural conditions, where few varieties of openings exist, situation not so serious. But under modern conditions (specialized work, mobility of labor, varying needs of technical preparation) existing situation of *laissez faire* very wasteful of energy, health, happiness. (c) Young citizen in allying self with party, in starting family, in considering place location, making investments, etc., often in need of assistance not obtainable from ordinary agencies of by-education.

2. Great desirability that in schools should be developed facilities for guidance for youths over 12 years of age, whether in full-time attendance or not. Guidance can make use of following means:

a. Publicity as to educational, vocational and civic possibilities. Involve (a) development of reading in great variety and of much concreteness and suggestiveness; and (b) lectures, illustrated and others serving similar purposes. Should include agencies of idealization.

b. Facilities for individual consultation with specialists informed as to possibilities and capable of interpreting needs and powers of prospectors (those seeking to make wise choices).

c. Tests, examinations, and other scientific means of diagnosing qualities of prospectors and of prognosticating probable directions of successful application.

d. Finding agencies (for schools, employment openings, facilities for further investigation, etc.) to intermediate between prospector and appropriate lines of future activities.

3. Economy and effectiveness to be achieved for persons under twenty or twenty-five only by keeping within school organization guiding agencies (libraries, tests, expert advice, permits, etc.), training agencies (vocational schools), and placement agencies, all under specialized and competent direction.

a. Note tendency to have vocational education provided paralleling vocational pursuit—and in dull seasons as self-chosen, “short sessions.” Vocational school best special means of vocational guidance.

b. Note probably large use to be made of specific guidance literature—reading, etc.

4. Necessity of basing guidance on accepted optimum standards of: (a) economic differentiation, productiveness, and shifting; (b) cultural attainment; and (c) civic participation.

a. Note need of revision of prevailing of conceptions of “social service.”

b. What are cultural contributions of vocation?

c. Note specializing of employing functions in large commercial agencies.

d. Problems of “over-crowded” fields of work.

5. Desirable that vocational training and vocational participation, voluntary as to field, shall ultimately be prescribed for all. But prescription of special forms only for minority of “slackers” who will not make choice for selves.

a. Where shall training for national defence enter?

b. Idealistic proposals for “moral equivalents of war.”

B. ECONOMIC AND SOCIAL ASPECTS OF VOCATIONAL GUIDANCE

1. Vocational Guidance can now mean two things or be of two forms (hereafter called Informative and Diagnostic).

a. Imparting of information about: varieties of work now available in the world; native and acquired qualities most suited to its performance; idealization of right work attitudes, vocational advancement, etc. (Compare with school and class instruction in hygiene, idealization of health and the like.) For these ends can be used: lectures, guided readings, various emotional appeals. Courses (not in too formal a sense) can be offered as electives to classes prevailing from 13-14 years of age, 15 to

16 years of age, etc. This work properly a part of *general* education.

- b. Expert examination of an individual towards definite recommendations, possibly prescriptions, as to: kinds of work he is now unfitted for; kinds of work he could not well prepare for; kinds of work to which, by virtue of native powers, acquired powers, economic resources, etc., he is now fitted; kinds of work to which, with proper education, he might become fitted. (Compare expert diagnosis of oculist, physician, psychiatrist, with consequent prescriptions against or for certain kinds of action.) Obviously this form of guidance must be individual, and should be available as far as practicable: (a) when the individual is ready to take further education of vocation or prevocational nature (define prevocational educational); (b) when he is ready to seek employment; and (c) when he seeks to pass from juvenile or other earlier to later and higher stages of employment.
- c. Assuming the presence of an abundance of easily read books *about* vocations in the library of the junior high school, could best services be rendered under (a) by having a departmental teacher give two hours a week to lectures and conferences centering around reading? What part could be played by visits to farms, factories, stores, etc? Would it be advisable to have recitations? If the school is large would it be advantageous to have a woman teacher of the subject for girls, and a man for boys? Could classes for this purpose well be as large as 100? Should pupils study anything here? What?
- d. Under what conditions could a pupil be required to undergo examination under (b)? Where not required, what motives for electing such examination could be expected (specify probable circumstances in: a college; high school upper classes; with retarded pupils in grades)?

2. The need of vocational guidance (to individuals) of a systematized kind under specialist school or employment auspices (informal vocational guidance under home and other agencies has always been available) increases greatly, if social efficiency (social economy) is to be realized, in proportion as:

- (1) The variety of occupations open to an individual increases.
 - (2) The requirements of many of these vocations become technical and difficult.
 - (3) Vocations are carried on in places invisible and inaccessible to growing youths.
 - (4) Apprenticeship, with its formal arrangements, selections, and responsibilities declines.
- a. What are the occupations normally open and desirable in central North Dakota respectively to: a fifteen year old boy of good

strength and manual ability and no strong intellectual interest; the same youth at twenty-one, assuming him to have worked meanwhile as a hired man at general farming; a girl at fifteen, of musical promise, poor parents, but girl and parents very ambitious for her; a farmer's daughter of good general scholastic ability, but poor health and greatly disliking farm life; a boy of fifteen, of prosperous parents with excellent health and mathematical abilities, very ambitious? Given a high school of 100 pupils in Streeter, N. D., would you advise inclusion of vocational guidance in courses? What kinds? To what expected ends?

- b. What are the occupations normally open and desirable in New York City to: the son of prosperous American parents who has excellent ability in athletics, mathematics, and "society," is very ambitious, and promises to be of the "executive" type; the daughter of rich Jewish (recent immigrant) parents, artistic (plastic and graphic) interests and some ability, poor scholarship in formal subjects, not good English speech, excellent health; the daughter of poor parents, strong in body, but low and backward in school work, and looking upon all work as a curse; the son of poor artisan parents, very keen mentally, eager for business success, but in poor health, and of irritable disposition? Given junior and senior high schools and evening schools in New York City, what would you recommend as to time and place of informative vocational guidance courses? Kinds of courses? Kinds and places of diagnostic work? For what purposes?
 - c. Examine relative needs of vocational guidance in: rural sections of central Texas; rural areas of Georgia (for colored population); Worcester, Mass.; Stockton, Cal.—giving separate consideration to: girls of low or average abilities in poor families; boys of exceptional specific abilities in poor families; and other realistic case situations.
3. The need of systematized vocational guidance to society (for the sake of leadership, avoidance of discontent, general health, avoidance of useless sacrifices, etc.) becomes great in proportion as:
- (1) Society develops great need for talented leadership or expert service. (Note means by which candidates in America are selected for West Point, for medical colleges, for scholarships, for specialized work under national, state and municipal civil service, for promotion in business, for certification as teachers.)
 - (2) Occupations develop to the point where very purposive training is requisite, and where ill-prepared individuals suffer greatly. (Note conditions now to be met by one who would "succeed" as farmer, stenographer, mine manager, hotel cook, public singer, travelling salesman, promoter of oil well drilling operations.)

- (3) Economic evolution creates conditions inimical to the health of all but specially fit or specially prepared individuals (note writings on "industrial diseases" and the pathological accompaniments of stone-cutting, elementary school teaching, mattress making, rag sorting, pottery manufacture, navigation, nursing, farming, steel working). (Consider separately for these workers: girls; mature women; boys; mature men.)
- (4) Economic evolution creates conditions of work so complex that the worker believes himself exploited and prevented from shifting or advancing as he desires. (Note that under primitive conditions man worked *against* nature, whereas in advance economic organization he seems to be working chiefly *against*, or in competition with, other humans; that he needs for his contentment knowledge as to whether he is in right work, etc.)
- a. Is it probable that the proportion of persons naturally endowed as geniuses (of various species), leaders, altruists (of exceptional influence), vagrants, subnormals, etc., is substantially the same everywhere—country and city, Massachusetts and N. Carolina, peoples of Huguenot and of Italian ancestry? Under similar social stimulus should we expect as many inventors from Georgia as Connecticut, as many feminists from the farms as from the suburbs, as many morons from Denver as from Fall River? Should and could society do more than it now does to try to discover potentialities in youth of promising poets, opera singers, military leaders, inventors, business executives, pugilists, baseball players, moving picture artists, physicians, teachers, statesmen?
- b. Historically has it been true that "anyone" could be farmer, country school teacher, homemaker, Congressman, salesman, storekeeper? Enumerate vocations now demanding (e.g., in morning *World*, New York) workers who need only be "bright girls," 16 years or more old. What are the vocations now open to more or less "broken" elderly women of no education? What are vocations now open to impoverished "gentlewomen"? Middle-aged farmhands? City-raised boys of 15? Steel factory workers of ten years operative specialization?
- Could one of these classes easily become a sailor, general machinist, watch repairer, dressmaker, vaquero, chauffeur, stenographer, dentist, actor? What qualities do bright girls, 18-25, bring to rural school teaching that men 25-40 who will work for the same money do not? A high school principal declares that employers only want in a boy that he has "pep" and in a girl that she is "quiet." Interpret?

At what age do men or women normally become: school principals; mine foremen; policemen; locomotive engineers;

college teachers; Congressmen; travelling salesmen; sailors; "full responsibility" homemakers (through marriage); sea-captains; business "managers"? What minimum general schooling is expected (by employing authorities) to precede in each case? Vocational schooling? Experience in related vocations? What unrelated vocations may precede?

- c. In a certain area granite stone cutting is the most accessible employment for muscular men of mechanical leanings. The tuberculosis rate is high in this industry. What problems arise for vocational diagnosticians?

What evidence have you that the following are relatively unhealthful occupations; cotton textile work for girls, 15-20; business leadership for men, 40-60; farm life for homemakers; bookkeeping for men, 30-60; elementary teaching for women, 30-40; medicine for women; hotel waitress service for women, 25-35; stoker and firing service on steamers; general work in dynamite factories; coal-mining; railway switching. What are your present prepossessions as to these and twenty other vocations to be named by you? Do you consider facts as to the vocational healthfulness of these callings important in guidance? How can sound generalizations be procured?

- d. Why do so few of the following leave their adverse home surroundings: Labrador fishermen, Bedouin Arabs, French peasantry, Central African negroes? Why do the following migrate: Irish peasantry, Russian Jews, mountain whites of Appalachians, Japanese, gipsies? Do the same peoples work generation after generation in American coal mines? cotton mills? farms? teaching professions? Why? In which of the following vocations do your prepossessions suggest that workers are most exploited or disadvantaged by "man" contrivance: coal mines, ten-cent stores, hospital nursing, pioneer farming, elementary school teaching, college teaching, laundry work, waiting service in large hotels, navy, tropical fruit growing, matrimony and homemaking (among the poor), market gardening? Compare the following vocations as to opportunities for intimate relations between employers and employees: law-offices; men's hat factories; cartridge factories; small grocery stores. What relative scope do each of these vocations give for exercise of the "creative impulse" (which first define): small pioneer farming; watch factory operative; department store clerk; coal miner, locomotive fireman; farm homemaker (Nebraska); orange grower? Which of the following vocations possess for you (or young persons known to you) the deepest halo of general attractiveness: candy store clerk; sea captain; bedside nurse; high school teacher; diamond cutter; gold miner (on small scale); raisin grower (California); fur trapper? Does distance (and what else) lend enchantment to the view?

Give examples where real apparent vocational "misfitting" is now readily possible, giving sources of your impressions.

4. Vocational opportunities are at any given time limited by:

- (1) Social demands for particular service;
 - (2) Accessibility of openings to potential workers;
 - (3) Possession of capital and tools;
 - (4) And by numerous minor factors.
- a. Estimate on basis of census figures probably annual replacements needed in the United States in the following fields of service: physicians; high school teachers, farmers; opera singers; elementary school teachers; building carpenters; diamond cutters; novelists; stenographers; automobile factory operatives; coal miners; domestic servants.
 - b. What will be probable openings (a) within California and (b) outside that state, caused by annual replacements of: lawyers, dentists, textile mill operatives, locomotive engineers, oil-well drillers, bank clerks, homemakers, firearm mechanics, teachers of music?
 - c. Out of 100,000 girls in the fifth grades of certain village schools in Iowa what proportion will or can normally find vocational openings as: physicians, 30-50; homemakers, 20-60; elementary school teachers, 18-24; same, 25-60; domestic servants, 16-22; same, 23-60; opera singers; civil service research specialists; farm operators; newspaper editors; dentists; store (indoor) clerks or saleswomen; barbers, saleswomen at salaries upward of \$3,000?
 - d. Out of 1,000 girls graduating from general courses in high schools in suburbs of Chicago, what numbers could and should find vocations as: trained nurses; counter saleswomen; "ladies of leisure"; lawyers; homemakers, 25-60; professional actresses; domestic servants; farm laborers; railway operatives?
 - e. Of 1,000 boys finishing first year of four year high school what proportion, in a city like New Orleans, is likely to become: agricultural field hands; physicians; high school teachers; skilled well workers; farm owners; trained nurses; hotel cooks, stenographers, 30-60? What changes of proportions would you predict for 1,000 high school graduates, same environment?
 - f. In a certain reform school in a New England manufacturing state are 400 boys age 13-17. Nearly all are retarded and more or less corrupted. Some are keen and lawless, many plodding and dull. Assuming possibilities of 1,200 hours of good vocational training in schools or corresponding part-time and apprenticeship, what vocations would seem most promising for them?

- g.* In a certain North Mississippi Valley State is a school for the persons blind from early childhood. The school is endowed to give 1,200 to 2,400 hours specific vocational training from ages 16-20. Take its problems as your own; are there vocations that prefer a blind to a seeing person of equal native and acquire qualities? What are vocations which would probably prefer a blind to a seeing person otherwise equal at 20 per cent. less wages? Is it expedient to train blind boys of good ability to be: dentists, high school teachers of mathematics, piano tuners, chauffeurs, cooks, farm operators? Should the girls try to become: nurses, primary school teachers, typists (without stenography), homemakers? What is now known about vocations for the blind of each sex, where competition with seeing of equal ability and perhaps less training is practicable?
- h.* To what extent should possible mobility of workers figure in vocational guidance? Compare the relative mobility (ability to leave home and travel to distant places) of following workers; girls, 15-20, of poor parents, living in city, and of average "manual worker" abilities; girls, 20-25, college graduates; boys, farm reared, suited to general "manual work", poor parents; boys, excellent ability, fairly prosperous families, trained for professions; skilled machinist with family of five children, active member of a church of small denomination; woman secretary age 45, with life-long associations in home place.
- i.* Under what conditions as to local openings, native abilities, sex, age, and possibilities of vocational training would good guidance advise girls from prosperous Minnesota farms to seek musical or acting vocations in New York; farm boys of mechanical bent to become city mechanics; boys of large eastern cities to become farmers; girls of village environment of excellent abilities and general college education and genuine interest in having families of their own to become lawyers or doctors; stenographers from Montana to seek Washington Civil Service post; native American southern negroes to seek barbering in New York?
- j.* What are now the various roads by which boys become "owning farmers" with land and equipment worth from \$10,000 to \$30,000? A city boy of 18, physically hardy and mentally able but owning no capital and with no prospects of inheritance, is keenly desirous of becoming an orchardist; what would you tell him? A country boy of 16, excellent ability, but no actual or prospective capital, greatly desires to become a merchant in a large city; advise him. A city girl of much enterprise, good education, and prosperous parents, but no capital of her own, is zealous to become a farmer; advise her.

What capital is now normally required, after completion of

vocational education, to equip necessary offices and to tide over "acquaintanceship" period for one who would be an independent dentist; plumber; shoe repairer; doctor; lawyer; grocer; pharmacist?

- k. Under what circumstances would you advise a college girl of excellent ability, in her third year college, to study architecture; a high school boy of bookish interests and moderate ability to become a country school teacher; a high school girl to seek a vocation that would not interfere with her matrimonial chances?

Would you advise a Massachusetts negro to enter a normal school in that state? A bright negress in a Rochester high school to prepare in stenography? A girl of native American stock seek a career in domestic service? A boy to follow stenography as a life career? A Russian Jewess of exceptional ability, but pronounced racial characteristics, to seek a high school position in Georgia, or Texas, or northern New York? A bright hunch-backed girl to become a primary school teacher, a trained nurse, a salesgirl, or a proof reader.

Certain vocations are good for juveniles but poor for adults. What would you advise workers as to "upgrading" or advancement? Discuss in this connection: textile operative work, grade teaching, "ten cent store" salesmanship, switch board operating, cigarette making, telegraph messenger service.

5. Problems of vocational guidance arise largely from defective sociological and psychological knowledge. Among current problems are these:

(1) Are certain vocations more "overcrowded" than others? By what standards? For what reasons?

(2) What is the full social significance of highly specialized production, and what should be expected to be the normal progress and stay of workers in them?

(3) Under what circumstances and to what extent can or should vocational guidance "blacklist" undesirable or anti-social vocations?

(4) What are the possibilities of "dual" or "alternate" or "major" and "minor" or "dull season" vocations?

- a. At the present time do you think that stenography is more "overcrowded" than domestic service? Medicine than electrical engineering? General factory work for girls than farming? Elementary school teaching than travelling salesmanship? What, as you see it, are the least, and what the most overcrowded fields now for: "unskilled" men workers, strong and mature? Average young girls of 16 in New York, with one year of high school education? For strong high school boy graduates able to give five or six years to professional education? What is the real meaning of: "There is always room at the top"?

In what vocations does alleged overcrowding seem the result

of indeterminate standards, or greatly variable standards under the same vocational name? Illustrate from farming (in days of public land settlement), public office holding, stenography, domestic service, brokerage, indoor salesmanship. When an employer asks: "What can you do"? and the younger applicant replies, "Anything," what does he mean usually?

What are some vocations now imperfectly developed which you think likely to develop greatly during the next few years? Would you advise persons of apparently suitable talent to try to become moving picture actors, brewers, orange growers, advertising illustrators, bond salesmen, high school teachers?

What are now the most "popular" vocations with college women; men graduates of Harvard and Yale; boys of exceptional mechanical ability?

- b. Analyze processes of subdivision of labor found in producing: shoes; cotton cloth; knitted goods; watches; cartridges; automobiles; packed fruits; pamphlets; newspapers; telephony; railway transportation; ready-made clothing; fountain pens; table pottery; coal; steel rails; staple furniture; sugar (beet); sugar (cane); raw rubber; men's hats.

Within any one of these fields, give varieties of workers, producers, supervisors, etc., grades (as expressed in compensation), and number in each. What facts can you discover as to relative maturity of workers in each grade? Under what kinds of vocational education could workers of sufficient maturity be advanced to higher grades?

What are your chief prepossessions against specialized work on the score of physical healthfulness? psychological healthfulness? social healthfulness? Contrast (in order to show effects of specialization) workers from farming, homemaking, retail shoe clerking, janitor service, peddling, sheep herding with workers of similar age, sex, and income from furniture factories, steamer navigation, locomotive manufacture, book manufacture, street car driving.

Define forms of leadership and highly paid special service now found in: street car operation; department stores; telegraphy; cloak manufacture; and explosives manufacture. To what extent and under what circumstances are these "advanced from the ranks"? Is it presumably economical for a street railway system to pay its president \$65,000 a year?

- c. What are some anti-social vocations besides burglary and other felonious pursuits? What place do you give to: cigarette making, tobacco farming, fire arms manufacture, "patent medicine" manufacture, military training, oil mining, stock brokerage, advertising illustration, opera singing, diamond cutting? Which of these vocations do you regard as of greatest relative service

to society: rural school teaching, fruit farming, jewelry making, commission merchant service, novel writing, dentistry, moving picture operating, naval service? How would or should recommendations or vocational guide be affected by valuations here?

Should vocational guidance urge: Boys to "stay on the farm"? Girls to strive decently towards matrimony? Young workers to get into work "without bosses"? All person to get "civil service" government places? Girls and women to get into fields now largely occupied by men? Men to take indoor salesmanship? Men to take elementary school teaching?

- d. Some vocations and especially those of a primitive type are composite—e.g., general farming, homemaking, small retailing, general handiwork, domestic service, machine repairing. Many other tend toward simplification. The following special problems arise:
 - (a) Is it desirable and expedient that a specialized operative, working with one type of machine, should be able to transfer to others, in case inventions or shifts diminish importance of his specialty?
 - (b) Is it desirable and expedient that workers in "seasonal" industries qualify to carry on others in "off" seasons (elementary school teachers often wait on table in summers; harvest hands take up railroad or lumbering work in winter, etc.)?
 - (c) Where factory operatives have eight hour day (and, in growing season, forty-four hour week) are gardening, poultry raising, etc., desirable and practicable minor vocations?
 - (d) Married women, under some circumstances, claim to find homemaking duties insufficient to fill all time. Can and should they seek opportunities for wage earning in teaching, farm labor, hotel service, factory work, writing, music? Discuss for poor economic levels (negress field workers), higher economic levels, and others.

6. The case method of study is now profitable means of opening up the actual problems in this largely unexplored field. As fast as practicable persons with professional aims here should assemble realistic cases. The following hypothetical types of cases are submitted as illustrative:

Case A: (individual). A boy in Bridgeport, Conn., has reached 16 years of age and just graduated from the elementary school. His father is a janitor, American born, his mother Irish born and of meagre education. Neither desires to support the boy longer in school (there are four smaller children in family). The boy has lost interest in general schooling (has been two years retarded) and is eager to earn money. Wants to be an electrical engineer, editor, or leading business man. Was low grade in school studies except vocal music in which he has moderate talent. Bridgeport is chiefly a machine shop city, with usual commercial openings. It

has good day trade school (2 years course) besides evening classes for persons employed in the shops.

- a. What do you know of opportunities in Bridgeport and vicinity?
- b. This boy desires advice as to next 10 years. What further facts do you need to know regarding him? What would you now advise him to do?
- c. Assume that he enters a gun factory as machine operative, and at 19 is earning \$30 per week, but is restless and wants promotion or a new type of work. What facts would you need to know and what advice could you now give?

Case B. (individual) In Albany, N. Y., a girl (Ellen) of 17 has just graduated from the classical high school. Her parents are poor Irish people with six children, all slow but Ellen, whom they have favored at much sacrifice because of her intellectual brilliancy. Earlier she was eager to teach, but her schoolmates have persuaded her that teaching is cheap and poor work and gives no chance to meet men. Ellen is especially strong in English, but poor in mathematics and music. Her parents cannot afford to send her to college; her mother is convinced that Ellen will marry by the time she is twenty. There is a large commercial department in the local high school, but no other opportunities for vocational training. The girl is in fair health, but inclined to nervousness. She may have to help towards the education her younger brothers and sisters.

- a. What are the principal accessible vocations of Albany?
- b. Would you care to give this girl vocational tests?
- c. Make recommendations looking to the (a) next two years; and (b) the next five years, on assumption she will not marry.

Case C (school). The junior high school of N. in Mass. has 1,200, 7th and 8th grade pupils, besides 200 retarded boys and girls over 12 and under 16. The community is mostly suburban. About 400 of the pupils come from homes that will not oppose their leaving school as soon as the law allows; and about 800 from families very ambitious to have their children finish high school. The school offers generous and flexible programs of manual training and household arts, a slight amount of gardening and no commercial work. All pupils leaving school after 14 must get working papers, involving a physical examination and capable of involving such other examinations as may be desired.

The school authorities have been convinced that vocational guidance is desirable and have appropriated \$2600 annually for this purpose (but with stipulation that not more than \$2000 shall be spent on salaries). But they have as yet no program and have asked superintendent to make recommendations. He asks you to submit yours. Especially does he want to know: (a) Should one full-time guidance teacher be employed, or a man for the boys and a woman for the girls? (b) Should proposed work be chiefly informative and inspirational, or diagnostic and placement? (c) Should any of it be obligatory on (1) all pupils or (2) pupils applying

for working papers, or should it be elective? (d) Should time be given it in the regular schedules of studies? Where? How much? For whom? (e) Is it desirable that the guidance teacher or teachers should influence aims or other studies? (f) What should be specific character of offerings (consider regular instruction, guided readings, individual advising, class visits to mills, lectures by teacher, etc.)?

Case D (school). In a prosperous farming (and related commercial) area in eastern Kansas is a high school of 200 pupils. The principal has given \$600 yearly to provide for vocational guidance. Nearly half the pupils will graduate, and half of these will go to normal schools and agricultural colleges. Many of the boys want to follow farming, but the girls aspire to urban work and permanent residence. Give this principal advice as to how to proceed.

CHAPTER XLIV

CURRICULUM PROBLEMS FOR INVESTIGATION

1. A curriculum is a collection of subjects of study suited to the educational needs of a defined group of learners. The *objectives* of education for the group should be implicit at least in the documented curriculum; and scientific clearness will be greatly furthered if, following diagnoses of present adult and learning groups, the objectives sought are themselves formulated as the basis of curriculum and program proposals. In a *detailed curriculum*, means (texts, readings, experiments, projects, problems) and methods (of organization, teaching, testing) may be indicated; while a collection of textbooks or manuals constitutes the most detailed supplemental guidance for work.

2. The objectives of a curriculum (and hence the curriculum itself) can best be studied in connection with "case groups" of fairly homogeneous character. The following pages give preliminary descriptions of over one hundred case groups, to which students are invited to add others. For effective work:

- a. Amplify in detail the essential present prevailing characteristics of the case group.
- b. Diagnose as far as practicable the prevailing characteristics of present-day adults who *ten to thirty years ago were learners of qualities corresponding to those of the case group being considered*.
- c. Prognosticate as far as practicable future prospects of case group if *the proposed curriculum were not available for them*.
- d. For the time being ignore temporary administrative limitations in carrying into effect proposed curriculum, including scarcity of competent teachers, lack of equipment, heterogeneous rather than homogeneous character of school attendance, especially in small places, etc.
- e. When optimum curriculum has been formulated, indicate changes necessary for schools exhibiting specified limitations of means, teaching personnel, or attendance.

3. Before proposing school objectives, estimate (eventually we must find ways of determining scientifically) (a) contributions of previous by-education, (b) contributions of parallel by-education, and (c) results of previous schooling.

4. You may within a given environment group differentiate those of very high and of very low intelligence from the modal group for purposes of proposing objectives for each grade.

5. In studies, subjects or other curriculum elements sharply differentiate developmental from projective objectives (alpha beta objectives).

6. Differentiate vocational from "general" or liberal objectives; and preferably, where practicable, differentiate physical, social and cultural objectives.

7. Distinguish sharply between prescriptions (of several varieties) and elective offerings.

8. As basis for *time* differentiations take total numbers of hours assumed as available for (a) year or (b) whole curriculum (perhaps two years—junior school or four years—liberal arts college) *including study, recitation*, and other related activities. Time for play (as part of physical education), excursions, general readings, etc., should all be included.

B. PROBLEMS OF CURRICULA FOR DESIGNATED GROUPS UNDER SPECIFIC CONDITIONS

Take *two* of groups below of same age level, and prepare curriculums, using some method of *parallel column* presentation, giving especial attention to justification of unlike features. (As far as practicable use subject analyses of Chap. XLVI.

In each case:

- a. Define (or estimate) possibilities and limitations due to heredity.
- b. Define (or estimate) conditions imposed by environment.
- c. Define (or estimate) positive and negative contributions of by-education (a) prior to employment of curriculum activities, and (b) concurrently with it.
- d. Define general and specific objectives (aims, expected results, goals, purposes) of curriculum on behalf of individual at close of curriculum period.
- e. Same, during adult prime (age 25-40 or 30-35).
- f. Define general and specific estimated objectives of curriculum on behalf of specified society (family, corporation, municipality, state, nation, religious organization, political party organization, international group, society in general, etc.) during three decades following close of curriculum period.
- g. Distinguish as sharply as practicable between objectives that are to be realized through developmental (beta—spontaneous, natural, "amateur play) activities, and those to be realized through systematized instruction and training ("artificial," "forced," work-a-day, disciplined, alpha activities).
- h. Distinguish between objectives expected to be realized:
 - (1) through activities almost wholly under control of school.

- (2) those ordinarily due to agencies of by-education, and
- (3) those due to other sources.
- i. Distinguish sharply between vocational and general (or liberal) educational objectives.
- j. Where practicable, distinguish among objectives of liberal education the cultural, social (moral, civic) and physical.
- k. Distinguish sharply between schemes of offerings (with specified conditions of election) and prescriptions.
- 1. Normals, ages 3-6, low economic level, congested urban environment, home-staying mother (no summer vacation removal).
- 2. Normals, 3-6, high economic condition, city environment (summer vacation removal).
- 3. Normals, 3-6, rural environment.
- 4. Normals, 3-6, day-wage-working mothers, congested city environment.
- 5. Normals, 3-7, day-wage-working mothers, village environment.
- 6. Subnormals, 3-6, note due to hereditary causes but to deficient environment and by-education (mal-nutrition, disease, uncleanness, bad habits) in congested urban environment.
- 7. Normals, 3-6, of alien home language, low economic environment.
- 8. Normals, 6-12, strictly rural environment (no consolidation of schools practicable).
- 9. Normals, 6-12, rural environment, consolidated schools of 100 or more practicable.
- 10. Normals, 6-12, village or open urban environment.
- 11. Normals, 6-12, low economic environment, crowded urban housing.
- 12. Normals, 6-12, prosperous urban or suburban environment.
- 13. Subnormals, 6-12, mental, as shown in school work, due chiefly to hereditary causes.
- 14. Subnormals, 6-12 (as shown in school work) due to environmental causes and deficient by-education (including migratory family life).
- 15. Variants—not subnormal, 6-12 (including brilliant, truant, undisciplined, etc.).
- 16. Normals, 12-14, last of compulsory full-time attendance, rural environment.
- 17. Normals, 12-14, village and open city environment.
- 18. Normals, 12-14, low economic conditions, city dwellers, probably wage-earners, 12-14 on, after period of compulsory attendance.
- 19. Normals, 12-14, high economic conditions.
- 20. Normals, 12-14, city and village environment, boys and girls with commercial interests.
- 21. Normals, 12-14, city and village environment, boys and girls with mechanical interests.
- 22. Normals, 12-14, city and village environment, girls with household arts interests.
- 23. Normals, 12-14, city and village environment, boys and girls with strong interests in abstract studies.

24. Normals, 12-14, country environment, boys and girls with strong agricultural interests.

25. Subnormals, 12-14, city and village environment (no hereditary defects but two or more grades retarded, owing to poor environment, by-education, etc.).

26. Normals, 14-16, with voluntary interest in abstract studies but likely to leave the general school at 16.

27. Normals, 14-16, with strong mechanical interests, not yet seeking special vocational education but likely to leave the general school at 16.

28. Normals, 14-16, with strong commercial interests but not seeking vocational training and likely to leave general school at 16.

29. Normals, 14-18, likely to remain four years in general school before seeking vocational specialization.

30. Normals, 14-16, under economic pressure and desirous of early self-support; in community offering openings chiefly in specialized industry and commerce (differentiate for sex).

31. Normals, 14-16, disposed to give two years to foundations of industrial training for entry upon wage-earning at 16.

32. Normals, 14-16, disposed to give two years to commercial training for entry upon wage-earning at 16.

33. Normals, terminating general education at 16, disposed to seek employment in wage-earning specialties.

34. Normals, terminating general education at 16, willing to give two years to foundations of trade training.

35. Normals, terminating general education at 16, disposed to give two years to vocational school preparation for commercial callings.

36. Normals, terminating general education at 14 or 16, disposed to give one or more years to vocational training for agriculture.

37. Normals, terminating general education at 14 or 16, disposed to give four hours per week of school attendance.

38. Normals, 14-16, in wage-earning employment, required by law to give four hours per week of school attendance.

39. Normals, 14-16, employed not more than 5 hours per day or 30 hours per week, required by law to give 15 hours per week school attendance.

40. Normals, 16-18, employed, not more than 30 hours per week, required to attend school 15 hours per week.

41. Normals, 17-25, voluntary attending evening trade extension schools.

42. Normals, 17-25, voluntary attending evening trade preparatory schools.

43. Normals, 17-25, voluntary attending evening schools for general education.

44. Normals, 17-25, voluntary attending evening social center schools.

45. Normals, 17-25, voluntary attending evening homemaking schools.

46. Normals, 14-25, voluntary discontinuing wage-earning employment for short course industrial preparatory instruction.

47. Normals, 14-25, voluntarily discontinuing work for short course vocational commercial education.

48. Normals, 14-25, voluntarily discontinuing wage-earning employment for short course homemaking training.

49. Normals, voluntarily attending full-time agricultural preparatory or extension vocational school.

50. Vocational education for teachers, of first 6 grades.

51. Vocational education for teachers, junior high school specialties.

52. Vocational education for teachers, secondary school specialties.

53. Vocational education for teachers, industrial school specialties.

54. Vocational education for teachers, homemaking specialties.

55. Vocational education for teachers, agricultural vocational schools.

56. Vocational education for teachers, commercial vocational school.

57. Vocational education for school nurses.

58. Vocational education for hospital and bedside nurses.

59. Vocational education for public health nurses.

60. Vocational education for (designated) professions.

61. Blind, 4-12.

62. Blind, general education, 4-16 or 18.

63. Blind, 14-25, for vocations under direction of state.

64. Blind, 14-25, for independent vocations.

65. Deaf, 4-12.

66. Deaf, general education, 12-16 or 18.

67. Deaf, 14-25, vocational education for vocations under direction of state.

68. Deaf, 14-25, for independent vocations.

69. Mental subnormals, highest grade, 6-12.

70. Mental subnormals, highest grade, 12-16 or 18.

71. Mental subnormals, highest grade, 14-25, vocational education for vocations under charge of state.

72. Mental subnormals, highest grade, 14-25, vocational education for independent vocations.

73. Mental subnormals, intermediate grade, 6-12.

74. Mental subnormals, intermediate grade, 12-16 or 18.

75. Mental subnormals, 14-25, vocational education for vocations under direction of state.

76. Mental subnormals, low grade, custodial, 6-18.

77. Mental subnormals, low grade, for vocations.

78. Cripple children, 4-12.

79. Cripple children, 12-18.

80. Crippled children, 14-25, for state controlled vocations.

81. Crippled children, 14-25, for independent vocations.

82. Delinquent boys under commitment or parole, 10-14.

83. Delinquent girls under commitment or parole, 10-14.

84. Delinquent boys, 14-18, under commitment or parole, general education.

86. Delinquent boys and young men, 14-25, under commitment or parole, vocational.

87. Delinquent girls and young women, 14-25, under commitment or parole, vocational.
88. Male prisoners, long term and recidivist, over 25, for institutional vocations.
89. Female prisoners, long term and recidivist, over 25, for institutional vocations.
90. Unemployed and vocationless adults.
91. Immigrants, non-English speaking, 12-16.
92. Immigrants, illiterate, 16-25.
93. Illiterate adults, native born, of English speech.
94. Special programs for talented individuals or leaders, 12-25.
95. Vocational education for men enlisted in navy.
96. Vocational education for men enlisted in army.
97. Education of boys, 14-17, for national defense.
98. Education of men, 18-25, for national defense.
99. Vocational education for prospective bricklayers.
100. Do. for garden farmers in (specified locality).
101. Do. for homemakers, urban dwellers, family income \$900 to \$1350.
102. Do. for stenographers in large commercial houses.
103. Do. for mates on lake vessels.
104. Do. for specialized shoe operators in factories.
- 105-110. Vocational education for other specific fields to be selected.

C. CURRICULA FOR CASE GROUPS

Each study should involve a running comparison of proposals, etc., for two groups having the same arabic number:

- 1a. Children, aged 4-6, of crowded manual working class environment, large families, mothers not working for wages, parks twenty minute distant, streets dangerous, sanitary conditions poor, parentage largely foreign.
- 1b. Children, 4-6, of prosperous suburban environment, good cultured homes, safe streets, abundant play places, fair sanitation, three months seashore or mountain vacation residence, etc.
- 1c. Children, 4-6, of backward rural area, small homes, mother not strong in hygiene or homemaking, homes average one quarter mile apart, half the families tenants of foreign ancestry, residence continuous through year.
- 1d. Student may supply.
- 2a. Children, normals, of prosperous suburban environment, good cultured homes, ample sanitary play spaces in and out of homes, all may be expected to finish high school. About three months can annually be spent in mountain and seashore vacation, families small, mothers anxious that schools take large responsibilities if health of children is not impaired.
- 2b. Normal children, 6-9, of crowded factory environment, largely foreign parentage, mothers not working for wages, fathers earn ample for

nurture and clothes, but home standards of food preparation, hygiene, culture and morals low. Large majority of children will leave full-time schools at 15 or 16 and enter manual occupations. No vacation period away from home, environment offers only traffic crowded streets and few vacant lots nearby, parks distant, photo drama theatres abundant, only evening newspapers generally read.

Students may analyze still further essential general characteristics of these groups.

2c. Normal children, 6-9, prosperous farming environment, homes average 600 yards apart, region broken by hills and streams, farming of "general" type including live stock. Parents interested in better homes and extension courses, will try to send children to high school, agricultural college, normal school. Consolidated school accessible, transportation averaging two hours daily.

2d. Student may supply.

3a. Children, normal physically and up to grade, aged 9 to 12; fathers skilled, well-paid workers; American ancestry; mothers average elementary school education; fair home makers. Homes, separate or semidetached houses, not crowded; adjacent parks, and streets fairly safe; general civic conditions of city bad. Few of the children will become wage earners until sixteen, and half will go through general, commercial, or industrial schools, and will strive towards other than manual vocations. Cultural opportunities of homes are meagre, but commercialized amusements, including beaches abundant; good public library, poorly used; year-round residence in homes.

3b. Children slightly subnormal physically, but up to grade, aged 9-12, in crowded, poor apartment house neighborhood; fathers mostly of foreign birth, in unskilled or factory operative work, earning wages which enable families to live without wage earning of mother, if children (4-8 per family) begin wage earning at 14; little interest in high school or higher education and eighty per cent of children will leave school when law allows (14 for those past 5th grade). No good vocational schools accessible; local hygienic, moral, and civic conditions bad; no parks, no vacation trips.

3c. Children, 9-12, of prosperous suburb, expected to go through high school and towards professions or high business callings; spacious homes, three months summer vacation away from home possible, if school closes long enough; mother cultured, but busy with social obligations, some useful, some diverting, some harmful. Children read magazines and library books freely; and are allowed freely to patronize movies; girls are restrained from rougher sports and have insufficient outdoor life.

3d. Children, 9-12, irregular in health, culture, and school grades; in backward hilly farming district, parents dissatisfied, but thriftless; sanitary conditions bad; farms originally good (markets are near) but deteriorated; little encouragement yet for farm extension workers and abler farmers tend to move out for better land, schools and surroundings; no opportunity for consolidated school, but situation permits trained and ex-

perienced teacher to be employed, with good schoolhouse; boys help much on farm, but prevailing attitude is to go to nearby factory work when old enough; only negligible proportion of boys and girls will go to distant high school; no agricultural school accessible.

3e. Student may supply.

4. Assume for cases 4a to 4d inclusive, existence of large (1200 seat) well equipped high school (abundant shops and playgrounds and some garden space) with all needed departmental teachers and pupils coming from all kinds of urban environments. Two hundred pupils are over 12 and under 16, but below 7th grade in formal (alpha) subjects. Separate curricula are provided for each of four potential groups distinctive by virtue of abilities and probable prospects, but with no distinction as to class membership in common subjects and understanding that while teachers can advise any individual as to curriculum best suited, parents finally decide; and no pupil can be excluded from a subject or curriculum except on established evidence of inability to meet its standards.

4a. Three hundred boys, 12-14, normal in health and grade, of only average or poor intellectual interests, of strong athletic interests and some disposition towards skilled manual employment; because of home conditions will probably go to work before 16; environment is not conducive to very good citizenship, or refinement of manners; half-developed "trade school" (carpentry, machine shop, printing, electricity) available after 14. Recommend details of curricula of prescribed, alternative, and optional subjects.

4b. Two hundred girls, 12-14, of poor families; girls intellectually keen and parents ambitious for them, but burden of keeping them at school after 14 will be onerous, as families are large; poorly developed physically, and prospects of ill-health; marriage usually takes place at 21-24; opportunities available for commercial and factory work (last is unpopular); prevailing manners coarse, English imperfect—and tastes for amusements low.

4c. Boys, 12-14, of keen minds and very favorable home environment; travel and camp each summer; good manners, strong tendencies towards athletics; speech mostly slang; will be expected to go to college to enter professions or business at from 20 to 25.

4d. Student may supply.

4e. Fifty boys and girls, one fourth of them retarded; in consolidated rural schools; all parents farmers of variable prosperity; children work at chores the year round and eight hours daily in vacation, few amusements; tradition is to seek towns for work after 17; a few bright ones will be sent to high school and college.

5. Assume for cases 5a to 5d large urban non-vocational high school with all subjects elective. Half of the subjects are organized on the assumption that students electing them will leave to enter vocational schools or vocational employment at 16. Teachers advise individuals and their parents in light of probable approximation to case group as given. You

are to work out curricula to be recommended in accordance with your conceptions of desirable and practicable offerings for case groups. Assume existence of good commercial, and weak trade, schools paralleling high schools.

5a. One hundred normal boys, 14-16, from poor homes and large families; slight interest in abstract alpha studies; strong interests in sports and acquiescent to prospects of wage-earning work in mechanical industries; may be expected to spend one or two years only in high school, and would probably stay two full years if some diploma recognition could come at end of the tenth grade; have poor civic interests, low ideals of English expression, and only meagre interests in general reading; health prospects good.

5b. One hundred girls from rich families, large homes, expect to go to college, but only for social reasons as now felt; average to excellent mentally, nervous physically and often overwrought by social excitement; are extravagant, luxurious and unconsciously selfish; have never worked physically and do not seriously expect ever to do "hard" work of any kind, but the least selfish talk vaguely about "social work" and the "new professions for women"; their civic ideals are half "parlor socialistic," half reactionary, strongly feminist, and anti-domestic; have given much time to music, but with no deep interest; are inveterate readers of light fiction; ideals of English speech are low, and of manners "up-to-date." Sixty per cent will marry, 25-30; remainder will remain celibate with moderate inherited income. Plan curricula for grades 9 and 10 on assumption that bulk of strictly "college preparation" can be completed in grades 11 and 12.

5c. One hundred girls of exceptional ability, but whose families will require them to go to work not later than 18, and some of whom will have to spend years 17 and 18 in vocational schools (stenography, salesmanship, grades). Are below par physically, excellent in civic interests and normal character, and not interested in serious homemaking, but can easily offer amateur household arts interests. Are from crude environments, effects of which on manners and speech lower schools have not completely overcome. Marriage age for the most of them will be 23-26. Plan for grades 9 and 10 only.

5d. Students may supply.

6a. Fifty girls, 15-17, tired of general high school, anxious to get to work, but willing to give one or even two years to vocational training if they can see definite outcomes in wage-earning, job commanding power. Are from poor families, manual workers in large cities, and of only average ability and presentableness. They despise domestic service, will take "dirty" factory work only under compulsion, and aspire to "clean" work, especially where surroundings are socially stimulating. Have no aspirations for permanent careers or to save money, and in fact may be expected to marry at 22-24. Give vocational guidance and plan vocational training.

6b. One hundred boys, 15-17, strong and capable, in city of machine shop

industries and large business, and railway facilities. For economic reasons all must soon be earning money. They aspire to be skilled mechanics or even more, but vaguely, "business men." Superintendent asks you to plan vocational schools and courses in light of formulated (by you) assumptions as to requirements of industry (or vocational openings for workers).

6c-6f. Group vocational cases, ages 14-18, to be supplied by student.

7a. Fifty men, 19-30, operatives in textile mills, apply for evening work. Elaborate case details and proposed offerings.

7b-7d. Other analogous cases.

8a. One hundred pupils, 15-17, working in factories, obliged by new law to attend continuation school 4 hours weekly. Elaborate details, and propose curricula and administrative conditions.

8b-8d. Other continuation school cases.

9a. Fifty blind youths—boys and girls, aged 14-17, obliged to leave institution and become self-supporting at 18, with possible extension of time to twenty for very bright in vocational training. Have at 14 had almost equivalent of elementary school, education with adjustments needed by blind. Propose curricula, 14-17.

9b-9e. Similar problem for other types of defectives or subnormals.

D. FACTORS TO BE CONSIDERED AS FAR AS PRACTICABLE IN MAKING CURRICULUM PROPOSALS

Do not lose sight of fact that requirements of two unlike groups of same ages must be basis of study, and that factors of any specific kind should be considered in immediate contrast or similarity, with especial emphasis on reasons for differences.

1. Previous school and by-education presupposed (brief).
2. Parallel or accompanying by-education presupposed and evaluated (brief).
3. Practicable pupil-year financial resources assumed to be available (1920 expenditure standards).
4. Pupil time per day, per week, and per year assumed to be (a) desirable and (b) practicably available for proposed program (but assume available eight hours daily in city schools if educators agree).
5. Proposed alpha objectives primarily for good of individual.
6. Proposed objectives primarily for society or the state.
7. Proposed objectives functioning apparently first for good of a individual but ultimately for collective good.
8. Definite consideration (even if for rejection) of *all* objectives suggested for age group, under consideration in Chap. XLVI.
9. Time allotment for study, recitation, development, and recreation for each subject or specific objective, separately considered as alpha or beta class objectives.

10. Sociological justification of:
 - a. General prescription of subject (all learners).
 - b. Prescription for diagnosed group.
 - c. Optional offering.
 - d. Recommendation against taking.
 - e. Prohibition against taking, individual or group.

E. SUGGESTIONS FOR STUDY OF "OBJECTIVES" TO BE REALIZED THROUGH USE OF SUBJECTS NOW DEFINED AND MORE OR LESS TRADITIONAL

(Possible reading references, see Bibliography.)

1. What are objectives now commonly held partisans on behalf of this subject?
2. What results now believed to accrue from subject as commonly organized and presented?
3. Critical comparison of aspirations and results of subject as now usually offered.
4. Objectives that you deem valid and important for the subject for certain specified groups of learners, and comparison of relative importance with other subjects that might have the time and energy proposed to be given to this.
5. Proposed organization of subject to realize specified objectives.
6. Methods proposed for the achievement of objectives through reorganized subject.

F. SUGGESTIONS FOR STUDY OF OBJECTIVES AND PROPOSED SUBJECT MATTER IN A FIELD NOW POSSESSING NO TRADITIONALLY ORGANIZED SUBJECT

1. Definition of proposed objectives, and their social evaluation for specified groups.
2. Evidence that these objectives are not now realized by other means.
3. Proposed organization of subject matter and method.

CHAPTER XLV

PROBLEMS OF OBJECTIVES OF SUBJECTS FOR INVESTIGATION

1. Below are given tentative analyses of school subjects already well known and of some proposed new subjects. In most cases the actual "objectives"—that is, the useful purposes for individuals or for society—have not been well established. Numberless problems of scientific inquiry can easily be devised here. Following questions indicate methods of attack:

- a. Should the subject be required of all pupils of given grades, ages, or attainments? Why? What useful ends—to the individual, to the state, to society at large—can be served by such requirements (always remembering that specific educational values are relative to other values, educational or other, that could be achieved with available time and energy)?
- b. Should the subject be required of some? Why?
- c. Should it be permitted or open to election by some? Whom? Why?
- d. Should it be denied to some? Whom? Why?

2. An essential sociological means to such study is "case analysis"—of individuals or groups—of adults, e.g., from age 30 to 50—as to their possessions and deficiencies of the qualities expected to accrue from the proposed study, followed by evaluation of the advantages and disadvantages—individual and social—resulting from such possessions and deficiencies.

- a. It is a schoolmaster's weakness to hold that "all boys" (perhaps) should be taught "pronunciation" (different from that learned at home), Latin, civics, gymnastics or cube root without examination of the conditions now found among adults growing out of former presence (or absence of such studies).
- b. To what extent do adults now use or feel the need of using: French, trigonometry, knowledge of the causes of tides, remembered knowledge of the river systems of Asia, skill with saw and chisel?

3. The "developmental" and "projective" objectives should be distinguished as clearly as practicable, and social justification found for each.

4. To prosecute the study:

- a. Clearly define what is meant by subject (with concrete instances)

- b. Clearly designate the age, ability and environments with references to whose needs or interests it is to be studied.
 - c. Indicate for these groups: (1) expected previous schooling and by-education related to the objectives being studied; (2) expected subsequent educational opportunities, school and non-school; (3) expected available time and energy for *all* school work; expected time and energy available for subject being studied.
 - d. Diagnose adults or adult groups as to qualities corresponding to those sought on behalf of next generation of adults.
 - e. Define expectations of results in adult life—of alpha objectives; at least—to accrue from proposed studies.
5. Only after the foregoing topics have had careful consideration, the resulting problems been defined, and tentative assumptions made, should questions of *method* of organization or presentation receive more than brief consideration.

SUBJECTS

- 1. English speech for normal children, ages 4 to 6.
 - 1a. English speech for those 4-6 with other vernaculars or home languages.
 - 1b. English pronunciation.
 - 1c. Special English speech for oral defectives.
 - 1d. Correct usage and vocabulary.
- 2. English speech for normal pupils, 6-12 (give especial attention to effects of by-education).
 - 2a. Voice training, enunciation (as special objective).
 - 2b. Oral reading (as special objective) (special problem of oral reading as basis for silent reading).
 - 2c. Spoken vocabulary building.
 - 2d. Correct usage in spoken English.
 - 2e. Oral composition to audience.
 - 2f. Recitation (oral delivery to audience of memorized text).
 - 2g. Pronunciation.
 - 2h. Special classes—voice defectives, alien home vocabularies.
- 3. English speech for normals, 12-18.
 - 3a. Oral composition (defined as sustained presentation to audience).
 - 3b. Voice training, enunciation.
 - 3c. Spoken vocabulary building.
 - 3d. Oral reading and recitation to audience (elocution, oratory).
 - 3e. Correct usage in spoken forms.
 - 3f. Pronunciation.
 - 3g. Special classes—speech defectives.
 - 3h. Special classes—of alien vernacular.
- 4. English speech—liberal arts college.
- 5. English speech—teachers' training classes.
- 6. English speech—deaf pupils, 4-20.
- 7. English speech (class and objectives to be supplied by student).
- 8. English writing for normal children, 6-12.
 - 8a. Penmanship, reading, legibility and speed of execution, as objectives. Typewriting as minor problem.
 - 8b. Spelling—quality and scope (simplified spelling, as minor problem).
 - 8c. Composition, written (special attention to specific or sub-objectives).
 - 8d. Grammar, and correct usage, supplemental to that realized under oral English.

9. English writing for normal youths, 12-18.
 - 9a. Spelling.
 - 9b. Penmanship and typewriting for general use.
 - 9c. Grammar and correct usage.
 - 9d. Rhetoric and fine usage.
 - 9e. Written composition.
 - 9f. Word analysis.
 - 9g. English writing for stenographers.
10. English writing in liberal arts college.
11. English writing for blind, 4-20.
12. English writing (special subject).
13. English silent reading, normal pupils, 6-12.
 - 13a. English oral reading as basis of silent reading.
 - 13b. Special techniques of silent reading.
 - 13c. Special drills in silent reading of arithmetic, geography, history, newspaper.
14. English silent reading, normal pupils, 12-18.
 - 14a. Grammar and rhetoric in silent reading.
 - 14b. Special drills on subject matter of other courses.
15. English silent reading for special needs (subject to be supplied).
16. Silent reading for the blind.
17. Social education and development (including moral training, civic and ethical instruction, religious education, etc.) for normal children, 1-6.
 - 17a. Moral habituation, by-education.
 - 17b. Moral habituation, kindergarten.
18. Social education, normal children, 6-12.
 - 18a. Moral habituation, by-education.
 - 18b. Moral habituation, school groups.
 - 18c. Civic instruction.
 - 18d. History, instruction in.
 - 18e. Religious education.
 - 18f. Current events, historical.
19. Social education (social science, social development), ages 12-18.
 - 19a. Community civics.
 - 19b. Principles and practice of government.
 - 19c. Elementary sociology.
 - 19d. Elementary economics.
 - 19e. Study of nations—promotion of international co-operation.
 - 19f. Ethical instruction (indicate Fairchild's proposals for "character formation").
 - 19g. Boy Scout program of moral education.
 - 19h. Religious education.
 - 19i. Self-government in schools.
 - 19j. American history.
 - 19k. World history or special division of history as means of social education.
 - 19l. Literature as means of social education.
 - 19m. Other "fine arts" as means of social education.
 - 19n. Vocational participation as means of social education.
 - 19o. Special problems of habituation (habits, attitudes) in moral or social education.
 - 19p. Special problems of "moral or social intelligence" in social education.
 - 19q. Special problems of formation of ideals in social education.
 - 19r. Special problems of heredity ("original nature") in social education.
 - 19s. Special problems of schools' influence on agencies of by-education in social education.
 - 19t. Education for participation in national defense as phase of social education.
 - 19u. Social education as a by-product of military education.
 - 19v. Problems of group activities in schools as means of realizing some ends of social education.
 - 19w. Problems of "formal discipline" in moral education.
 - 19x. Geography as social science study.
 - 19y. Current history—history in the making.

20. Natural science for normal children, ages 6-12. (Adaptations of all physical and biological sciences—except portions of physiology reserved for physical education—to education of young people; and so defined as to include all approaches to correct—or non-mystical—appreciations of facts and interpretations of relationships, however partial or incomplete.)

20a. Nature study.

21. Natural science, 12-18 (defined as above).

21a. General science, as beta subject.

21b. Biology, as alpha subject.

21c. Physics, two phases, general.

21d. Chemistry, two phases, general.

21e. Astronomy.

21f. Earth science or physical geography.

21g. Physics, as prevocational.

21h. Chemistry, as prevocational.

21i. Problems of teaching "scientific method" in fields of natural science.

21j. Current information as to progress of science—a proposed beta subject.

21k. Agricultural science as element in liberal education.

22. Science in liberal arts college.

23. Agricultural science in vocational schools of agriculture.

24. Physical science in industrial schools.

25. Mental science for normal children, 6-12.

25a. "How to study," in general, or in particular field of attainment.

26. Mental science and development, 12-18.

26a. "How to study," in particular fields.

26b. Appreciation of scientific method, natural science.

26c. Appreciation of scientific method, social science.

26d. Specific exercises in training of designated mental powers.

26e. Appreciations, ideals, understandings, and controlled habituations, towards the "trained mind."

26f. Hygiene of mental work and play.

26g. Objective study (case, project and topic methods) of animal and human psychology.

27. Mathematics, 6-12.

27a. Fundamental arithmetic, written.

27b. Fundamental arithmetic, oral.

28. Mathematics, 12-18.

28a. Arithmetic, general.

28b. Industrial arts arithmetic or mathematics.

28c. Household arts arithmetic or mathematics.

28d. Agricultural arts arithmetic or mathematics.

28e. Commercial arts arithmetic or mathematics.

28f. Junior high school general mathematics, alpha grade.

28g. Junior high school mathematics, appreciative, beta grade.

28h. Prevocational mathematics, junior high school.

28i. Algebra.

28j. Plane geometry.

28k. Trigonometry, pre-engineering.

28l. General mathematics, appreciation, beta course.

28m. History of mathematics.

28n. Mathematics, problems of correlation.

29. Vocational mathematics.

29a. Specialized industrial mathematics (vocation specified).

29b. Specialized homemaking mathematics.

29c. Specialized agricultural mathematics.

29d. Specialized commercial mathematics (vocation specified).

30. Geography, 6-12.

31. Geography, 12-18.

32. Commercial arts geography.

33. Classical languages and literatures, 12-18.
 - 33a. Greek language, and literature in Greek.
 - 33b. Latin, language and literature.
 - 33c. Classical literature in translation.
 - 33d. Latin as medium or reinforcement of English language.
 - 33e. General course in classics, appreciation.
34. Modern foreign languages and literatures, 12-18.
 - 34a. French reading.
 - 34b. French, speech and writing.
 - 34c. German reading.
 - 34d. German, speech and writing.
 - 34e. Spanish, commercial reading.
 - 34f. Spanish, general reading.
 - 34g. Spanish, commercial writing.
 - 34h. Spanish, speech and general writing.
 - 34i. Russian.
 - 34j. Italian.
 - 34k. Portuguese.
 - 34l. Japanese.
 - 34m. Chinese.
 - 34n. Contemporary review of modern languages and literature (appreciative).
35. English literature, 2-6 (including story as used in kindergarten and before).
36. English literature, 6-12 (including oral story and all reading materials not specifically technical to another subject).
 - 36a. Tales, stories, fiction, biography.
 - 36b. Poetry.
 - 36c. Drama and dramatization.
 - 36d. Literature "masses," selected to affect special field of sentiment and action—humane treatment of animals, patriotism, religious attitude, ambition for success in life, appreciation of unlike peoples, appreciation of democratic ideals, etc.
 - 36e. Literature selections as basis of special English language studies.
37. English literature, ages 12-18.
 - 37a. Classical prose—including 19th century.
 - 37b. Classical poetry and reading drama.
 - 37c. American prose.
 - 37d. American poetry.
 - 37e. Nineteenth century poetry.
 - 37f. Drama and dramatization.
 - 37g. Contemporary drama.
 - 37h. Contemporary prose—including short and long story.
 - 37i. Contemporary poetry.
 - 37j. History of English literature.
 - 37k. Classical and modern foreign literature in translation.
 - 37l. Intensive analysis of selections.
 - 37m. Literature—selected materials—for achievement of special objectives, aesthetic, historical, or social (moral), e.g., understanding of place of mythology, appreciation of the courtship motive, stimulation of ethical ideals in relations of employees and employers, inspiring reverence, idealization of moral excellence in designated fields of conduct. (Note difficult pedagogical problems involved.)
38. Graphic and plastic art, 6-12.
 - 38a. Elementary drawing and artistic construction (representation, design, decoration, flat and round) (amateur execution).
 - 38b. Elementary graphic and plastic art appreciation (pictures, sculpture, decorations, "pure," "applied" in architecture, dress, landscape, other utilities).
39. Graphic and plastic art, 12-18.
 - 39a. Freehand drawing (representation).
 - 39b. Mechanical drawing, general education.
 - 39c. Painting, general education.
 - 39d. Decoration and artistic craftsmanship, general education (amateur execution).
 - 39e. Drawing (mechanical or other, prevocational).
 - 39f. Appreciation of applied art in environment.
 - 39g. Appreciation and interpretation of "pure" art—painting, sculpture, etc.
 - 39h. Graphic and plastic art, vocational for teachers.

40. Music, 1-6 (in home and school).
41. Music, 6-12.
 - 41a. Rote singing and appreciation—in concert and individual.
 - 41b. Appreciation of mechanically rendered music.
 - 41c. Music reading for voice.
 - 41d. Individual playing, instrumental.
 - 41e. Collective playing, instrumental.
42. Music, ages 12-18.
 - 42a. Chorus singing, without reading.
 - 42b. Chorus singing, with reading.
 - 42c. Music reading and singing, individual.
 - 42d. Reading for instrument and playing, concert or band.
 - 42e. Reading for instrument and playing, individual.
 - 42f. Musical appreciation, based on expert rendition supplied.
 - 42g. Musical appreciation, based on mechanical rendition supplied.
 - 42h. Selected music as means of realizing stated ends.
43. Musical training for designated vocations.
44. Practical arts, 6-12 (defined as manipulative work based on modifications or extractions from adult productive activities, taken in good amateur spirit, etc.).
 - 44a. Gardening, home and school.
 - 44b. Co-operation with home in household arts.
 - 44c. Field, home and playground industrial arts.
45. Practical arts, 12-18.
 - 45a. Industrial arts, junior high school.
 - 45b. Agricultural arts, junior high school.
 - 45c. Commercial arts, junior high school.
 - 45d. Household arts, junior high school.
 - 45e. Co-operation in home maintenance, industrial arts.
 - 45f. Co-operation in home maintenance, household arts.
 - 45g. School and public buildings repair and upkeep, industrial arts.
 - 45h. Market service, industrial arts craftsmanship.
 - 45i. Prevocational practical arts training for (specified) vocation or vocational training.
46. Physical development and education, 1-3 (defined as conservation and development of physical well-being).
 - 46a. Community oversight and co-operation in conservation of physical well-being of children under 3 (prenatal, infancy, etc.).
 - 46b. Play and play facilities, ages 1 to 3.
47. Physical development and education, 3-6.
 - 47a. Kindergarten as means.
 - 47b. Play and play facilities.
 - 47c. Special oversight for children of wage-earning mothers.
 - 47d. Problems of parentless children under 6.
48. Physical development and education of children, 6-12.
 - 48a. Play and play facilities.
 - 48b. Intellectual and other school work as related to physical development.
 - 48c. Physical work *vs.* physical play.
 - 48d. Instruction in hygiene.
 - 48e. Readings and other beta activities in hygiene.
 - 48f. School meals, free and purchased.
 - 48g. Problems of alternation of work and play, length of school day, recess, forced play, etc.
49. Physical development and education, 12-18.
 - 49a. Instruction in hygiene.
 - 49b. Provision of facilities for play.
 - 49c. Organized games and sports.
 - 49d. Competitive athletics.
 - 49e. Gymnasium training.
 - 49f. Military drill as physical education.
 - 49g. Extra-school physical work.
 - 49h. Extra-school activities—Boy Scout, dancing, etc.
 - 49i. Special hygiene—sex.

- 49j. Special hygiene—nervous work.
- 49k. Special hygiene—narcotics and stimulants.
- 49l. Problems of effects of school work and life on permanent health.
- 49m. Provisions to insure health of girls.
- 50. Physical training for (specified) vocation.
- 51. Vocational agricultural education, 14-25.
 - 51a. Farming, practical phase, for (specified) area.
 - 51b. Farming, technical phase, for (specified) area.
 - 51c. Farming, social phase, for (specified) area.
 - 51d. Poultry-raising, practical phase, for (specified) area.
 - 51e. Poultry-raising, technical phase, for (specified) area.
 - 51f. Poultry-raising, social phase, for (specified) area.
 - 51g. Repeat for other specified agricultural vocations.
 - 51h. Extension teaching for established specialists.
 - 51i. Professional agriculture for agricultural college.
- 52. Vocational industrial education, 14-25.
 - 52a. Plumbing, practical phase for (specified) area.
 - 52b. Plumbing, technical phase for (specified) area.
 - 52c. Plumbing, social phase for (specified) area.
 - 52d. Textile mill doffer hands, practical phase.
 - 52e. Textile mill doffer hands, technical phase.
 - 52f. Textile mill doffer hands, social phase.
 - 52g. Garment makers, mechanical operating specialists, practical phase.
 - 52h. Garment makers, mechanical operating specialists, technical phase.
 - 52i. Garment makers, mechanical operating specialists, social phase.
 - 52j. (Repeat for other selected industrial vocations.)
- 53. (Organize topics for commercial vocational education.)
- 54. (Organize topics for professional education.)
- 55. (Organize topics for homemaking education.)
- 56. (Organize topics for nautical education.)
- 57. Military training, boys 12-16.
- 58. Military training, boys 16-18.
- 59. Universal service training, men 18-22.
- 60. Part-time military training, 18-45.
- 61. Military (or defence) training, girls, 12-18.
- 62. Part-time defence training, women, 18-45.

CHAPTER XLVI

MISCELLANEOUS PROBLEMS OF EDUCATIONAL AIMS FOR INVESTIGATION

In each case, analyze and define descriptive terms and expressions commonly used. Show relation of educational objectives comprehended to other objectives necessary to make unified and comprehensive scheme for age and social groups specified. Determine whether a definitely bounded field of desirable objectives can best be comprehended and described by the terms used. Specify ages and social status groups for whom positive proposals are made.

1. Liberal education, as distinct from vocational education.
2. Cultural education.
3. Recreational education.
4. Education for leisure.
5. Education for character formation.
6. Education of taste.
7. Education for family life.
8. Education for national defence (not as a vocation).
9. Education for leadership.
10. Education for an industrial society.
11. Education of the emotions (or feelings).
12. Education of the will.
13. Education of the imagination.
14. Mental discipline through educational "simples" (mental arithmetic, grammar, Latin, geometry).

CHAPTER XLVII

BIBLIOGRAPHICAL REFERENCES

A. REQUIRED READINGS, TWO POINT COURSES

1. BLACKMAR and GILLEN Outlines of Sociology.
2. KELSEY, C. The Physical Basis of Society.
3. TUFTS, S. H. Our Democracy: Its Origin and Its Tasks.
4. SMITH, W. R. An Introduction to Educational Sociology.
- 5— To be supplied by students.

B. REQUIRED READINGS, THREE POINT COURSES

21. HAYES, E. C. Introduction to the Study of Sociology.
22. GIDDINGS, F. H. The Principles of Sociology.
23. SMALL, A. W. General Sociology.
24. WARD, L. F. Pure Sociology.
25. ROSS, E. A. Social Control.
26. DEWEY, JOHN Democracy and Education.
27. DEWEY and TUFTS Ethics.
- 28— To be supplied by students.

The titles under A and B are referred to by number in the text.

C. GENERAL REFERENCES

- | | |
|----------------------------|---|
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Explanations: B before a title indicates series of card references to that subject in card catalogue of Bryson Library, Teachers College. Thus: "B French study" indicates that under the title, "French study," will be found card references to books on that subject.

Ch. ref. means reference lists at ends of chapters.

Passim means references throughout text and in footnotes.

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Tewksbury, E. B.: *Sociological Factors*.
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Best, H.: *The Deaf* (footnotes).
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